

Hokikakika: History and archaeology of a Catholic village in the Eastern Tuamotus

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ABSTRACT

The atoll of Fakahina, in the eastern Tuamotus, was recently the focus of a multidisciplinary research project led by the *Centre International de Recherche Archéologique sur la Polynésie* (CIRAP). During our survey, we recorded the very well preserved remains of the early Christian village of Hokikakika. Here we present the ethnohistorical information regarding the development of the Catholic village gathered from missionary sources, present-day oral testimonies, civil records and a summary of the archaeological recording undertaken. The organisation of the mission and its surroundings is described, including different types of private houses and other features. The thorough multi-disciplinary investigation, the first of its kind in French Polynesia, of this exceptional ensemble represented across this missionised village, sheds new light on the daily lives of a newly converted community during the last quarter of the nineteenth century.

Keywords: French Polynesia, Tuamotu, Fakahina, Sacred Hearts, mission

*From 1867, the first large-scale apostolic campaigns started in the Tuamotus ; Fr Montiton had the honor to initiate them, followed by Frs Fierens and Terlyn.... Dealing with Islanders ... ; leading them slowly to civilisation and faith ; having them trace roads, plant coconut trees, dig wells and cisterns, build chapels, schools, small houses organised in gracious villages around the Cross; ... they perfectly filled, among the deprived, both their civilizing duty and their apostolic mission.*⁴

(Father Jean-Baptiste Piolet [Society of Jesus], 1902).

Archaeology in French Polynesia has largely focused on pre-European periods, leaving the investigation of post-contact times in the hands of historians and anthropologists. Certainly, nineteenth and twentieth century colonial buildings in Pape'ete and military structures such as the Tairapu fort in Tahiti or Fort Collet in Nuku Hiva (Marquesas), as well as many old churches have been progressively listed by the Territory and recognised as significant remnants of Polynesian history. However, none have benefited from detailed archaeological study. In contrast, other parts of the Pacific such as Hawaii (Flexner 2010), Vanuatu

(Flexner 2016), New Caledonia (Lagarde 2020a) and New Zealand (Campbell and Furey 2013; Jones 2012; Middleton 2008; Petchey and Brosnahan 2016), have seen the development of historical-period archaeology which includes a growing body of work that has focused on buildings. More particularly, the architecture and places associated with the spread of Christianity have recently been the focus of important studies in the southwestern Pacific (Flexner *et al.* 2015, 2016; Zubrzycka *et al.* 2018), which has proved highly valuable in the reconstruction of social changes following Western contact.

Within the context of a recently started multidisciplinary program led by the Centre International de Recherche Archéologique sur la Polynésie (CIRAP) team in the Tuamotu archipelago, or *pa'umotu* islands (Molle 2018), we came to investigate the very well preserved remains of the early Christian village of Hokikakika, on Fakahina atoll. This complex architectural ensemble offered us the opportunity to document the transformations of a *pa'umotu* community in the larger context of the evangelisation of this region by the Congregation of the Sacred Hearts of Jesus and Mary⁵ in the second half of the nineteenth century and of the establishment of a copra economy. This is the first investigation of this kind ever conducted in French Polynesia. It combines examination of ethnohistorical and missionary written sources with the archaeological investigation of physical remains connected with the village. We particularly focus here on the spatial organisation, various

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5 Also referred to as Sacred Hearts Fathers or even Picpus Fathers (because their first building was located in rue de Picpus, in Paris).

types of construction, and architectural evolution of the buildings in the village over almost three decades.

SOME ASPECTS OF THE PRE-MISSIONARY CONTEXT

Fakahina Island is located 950 km north-east of Tahiti, in the northeastern part of the Tuamotu archipelago (Figure 1). This oval-shaped atoll consists of a coral island of some

11 km² in surface encircling a lagoon of 6.8 km by 3.6 km. Only one passage (*hoa*) through the coral reef, located in the south, allows connection between the ocean and the lagoon.

Before the start of our project in 2018, the pre-European history of this island was poorly understood. Documenting the initial human settlement remains quite challenging due to a general lack of stratified deposits on most low-coral islands. Additionally, regular cyclones and tsu-

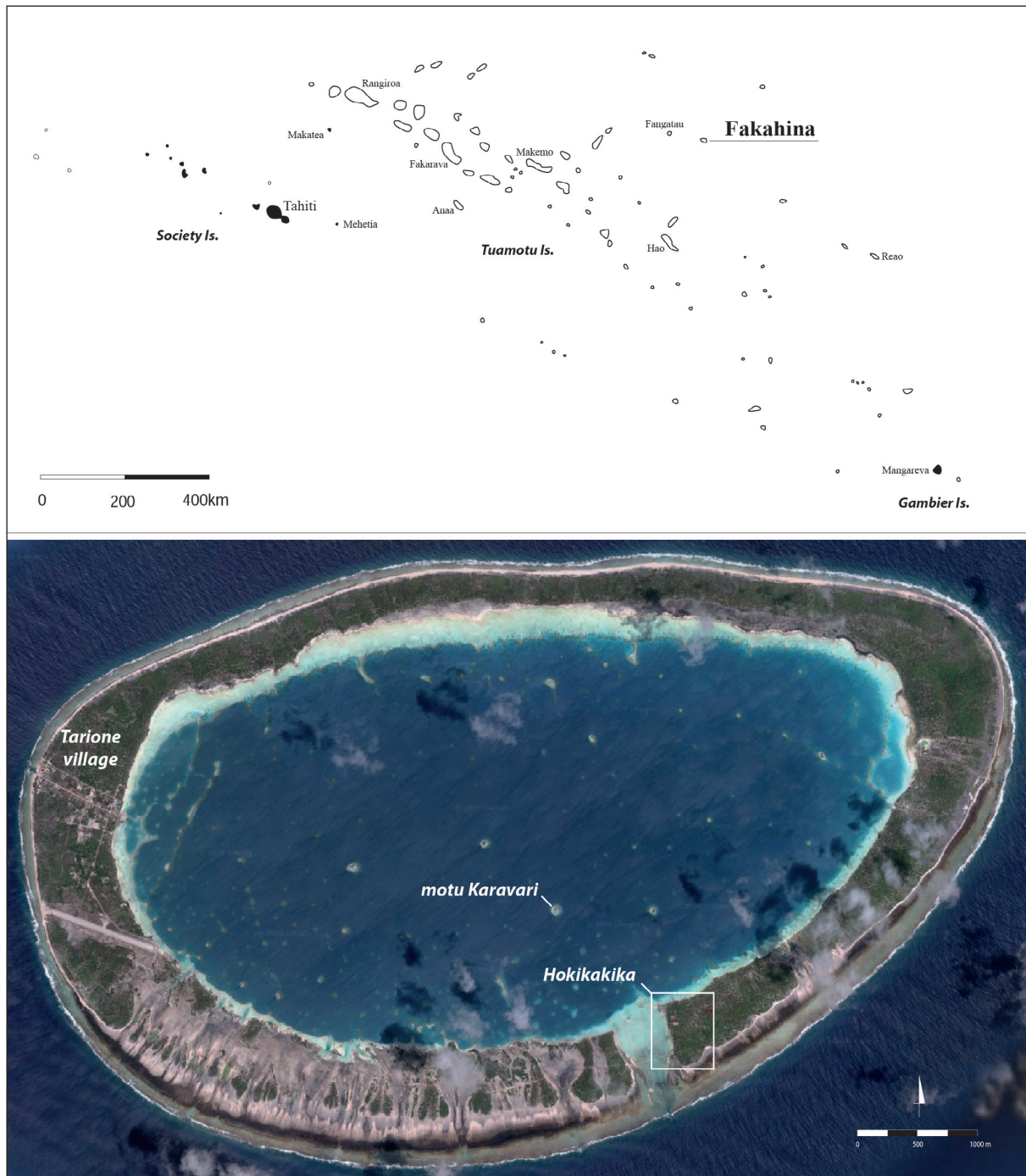


Figure 1. General location and satellite view of Fakahina atoll (source: Google Earth).

nami episodes tend to severely impact the preservation of surface archaeological features (Molle 2016; Nolet in press). Although situations may vary across the region, geologists have reconstructed sea-level changes in the northern fringe of the archipelago suggesting that the islets were formed, and thus became viable for habitation, about 500 years ago (Montaggioni *et al.* 2018). We can therefore hypothesise that the atolls were progressively discovered and settled by communities from the neighboring high-islands (either the Society Islands, the Marquesas and/or the Gambier) from the sixteenth century onwards.

Magellan was the first European to encounter the Tuamotus in 1521, appearing off the coast of an island, long considered to be Pukapuka, although it may have in fact been Fakahina (Berrocal and Sand 2020). More certainly, the latter was sighted by the Russian navigator Otto von Kotzebue in 1824, and named *Predpriatie* after his ship. He described some men and women coming out of a few huts and gathering on the shore. Apart from another brief description by British explorer Edward Belcher in 1837, the remote atoll remained very little commented on. These two historical references clearly attest to human occupation of the island, which is further demonstrated by the archaeological record. Following the first descriptions of archaeological remains by Seurat (1905), followed by Emory (1934) and more recently Conte (1990), we have now completed an extensive survey and recorded 55 structures including mostly *marae* sites, but also large areas of cultivation pits, some wells, and supposedly domestic remains (see Jacq *et al.* 2011; Molle 2018). The *marae* especially provide evidence of the socio-religious dynamism of the community that settled all around the atoll. This corresponds with traditional information recorded by the Catholic missionary Father Hervé Audran (1927a: 232–33) regarding three main *gati* – cognatic clans – that occupied different parts of the atoll.

The history of Fakahina in the middle of the nineteenth century happened to be closely tied to the political situation in Tahiti. Paiore, a high chief from Anaa, was appointed ‘regent of the Tuamotus’ and charged with ‘bringing the people of the East to civilisation’ (Audran 1927b: 254). His second visit to Fakahina, on September 20th 1860, set in motion a series of dramatic events that ultimately led to the abandonment of the atoll. Audran (*ibid.*: 254–55) reports that Paiore’s men, once ashore, deliberately provoked the inhabitants of Fakahina settled at Hokikakika, on the east bank of the sea channel. Among the incidents, the foreign warriors are likely to have desecrated the *marae* Varokia, seen as a testimony of pagan rituals in contradiction with the Christian religion adopted by the Tahitian rulers. In reaction to this bellicose behavior, the Fakahina attacked and killed six of Paiore’s men, most victims being *pa’umotu* chiefs.

Alerted by the sole survivor, Paiore returned to Tahiti to inform the authorities. In response, the Governor Gaultier de la Richerie organised an expedition of *fusiliers*

marins (naval fusiliers), placed under the command of Captain Lejeune, on board the corvette *Cassini* joined on the way by several hundred *pa’umotu* warriors eager for revenge (Anon. 1934: 410; Audran 1927b). The aim was to find the killers and take them prisoners so that they could be brought to justice in Pape’ete. However, on December 31st 1860, the operations turned into another massacre. While the foreign warriors were approaching their village, many Fakahina fled and took refuge on a coral pinnacle *motu* in the lagoon. Some local fighters tried to defend the latter but were rapidly defeated. Historical accounts mention 6 to 11 deaths among Fakahina men (Anon 1934: 412; Montiton 1869: 12), although these numbers might be ‘well inferior to reality according to eyewitnesses’ (Audran 1927b: 257).

According to Father Albert Montiton ‘all the population of the island’ was then taken on board the *Cassini*. According to Father Audran (1927b: 257), women and children were disembarked in Fakarava and Anaa, where the missionaries of the Congregation of the Sacred Hearts of Jesus and Mary had arrived in 1849–1850. A parish register in the Pape’ete Archdiocese’s archives mentions that Father Germain Fierens baptised the first Fakahina islander, Teroro, a 10 year-old daughter of Teagi, in Anaa on April 7th 1861 (n.d.). All the ‘mature men’ (Audran 1927b: 257), among whom was chief Maruake, were brought back to Tahiti to be judged in court. However, by the end of the trial, the Fakahina were reprieved due to a lack of evidence and unclear circumstances surrounding the massacre of Paiore’s men (*ibid.*: 258). According to Father Audran, they were especially encouraged to develop coconut tree plantations, an economic activity that had already proved successful on some of the atolls, such as Anaa.

THE FOUNDING OF A CATHOLIC VILLAGE ON FAKAHINA

During their forced exile, the still ‘pagan’ Fakahina islanders had close contacts with Polynesian converts and Catholic missionaries. The Congregation of the Sacred Hearts of Jesus and Mary, founded in 1800 by Pierre Marie Joseph Coudrin, had been entrusted in 1825 with the evangelisation of Hawaii, and in 1833, the responsibility of the Vicariate of Eastern Oceania (Wiltgen 1979). In the archipelagos of present-day French Polynesia, where many islands were already Protestant after decades of influence from the London Missionary Society, the Sacred Hearts first targeted the remote Gambier (from 1834), where significant numbers of conversions were achieved in a short time. In 1849, the Sacred Hearts Fathers founded a new mission⁶ in the West-

6 Mission is an ambiguous term. Here, we refer to the broader ‘Mission of the Western Tuamotus’, i.e. a Catholic epicentre allowing the dispersal of faith among the islands. ‘Mission’ can also refer to the architectural complex at the centre of a Catholic village (church, school, presbytery, cemetery), in which case we have used italic font.

ern Tuamotus (Laval 1851), where they met fierce hostility to the French Protectorate and suffered competition from evangelists of the Church of Jesus Christ of Latter-Day Saints (or Mormons). For many years, they were only confined in this region of the Tuamotus, where they sought to consolidate their position. From the 1860s, however, missionaries based in Anaa and the Gambier endeavoured to evangelise ‘heretic’ or ‘pagan’ atolls⁷ of the central, north-eastern and eastern parts of the archipelago, such as Reao, Napuka, Vahitahi, Tatakoto and Fangatau. The geographic dispersity of the atolls, dangers of navigation and lack of missionary personnel still posed considerable obstacles. Thus, Tematagi was reputedly the last pagan atoll to be converted by the Fathers, in the early 1880s.

Missionary accounts indicate that the Fakahina islanders who had been sent to Tahiti were ‘educated’ during their trip and stay there (Montiton 1869:12). Later, most if not all did not return immediately to their atoll, but were instead sent to Anaa (by then the centre of the Tuamotus’ Catholic mission) where many were baptised by Father Nicolas Blanc. From there, they went to Mangareva (*ibid*). In either 1862 or 1863, islanders were finally brought back to Fakahina on board the schooner *Notre-Dame-de-Paix*, together with ‘about ten’ Mangarevans, who undertook to build a provisional chapel under the direction of Father Bruno Schouten (Audran n.d.; Montiton 1873:278). According to Father Audran, this chapel was simple in construction, with a roof made of plaited coconut leaves, but it also had a ‘stone altar’. Later, it would become a *fare himene* or meeting house for catechism. Prayers and catechism were then said in the Mangarevan dialect (Audran n.d.). Some Fakahina stayed longer in the Gambier, ‘probably to improve themselves in the Christian faith and the habits of civilized life’ in the opinion of Father Audran. It is only when the *Notre-Dame-de-Paix* was sent to Fakahina to repatriate the Mangarevans that the last Fakahina were able to return.

It appears certain that Father Schouten (1863) encouraged the inhabitants to destroy some of their old religious sites while he was in Fakahina. In a letter he wrote in November 1863, the missionary explains that after blessing the newly-built chapel on 15th August 1863, he convinced some Fakahina to help him overthrow the ‘enormous stones’ of some local ‘altars’. By doing so, he hoped to ‘take away the thought of doing some act of idolatry’ after his departure the following day since ‘several’ inhabitants seemed to still ‘fear these gods and respect these places’. The atoll was not revisited by missionaries for five years. In November 1868, Father Montiton embarked on a pastoral journey of several months with *pa’umotu* catechists, some being recruited on the way (Montiton 1869). After landing in Napuka and

Fangatau, where he baptized children (*ibid*:4, 7) and left catechists, he reached Fakahina in March 1869, fearing that the neophytes might have ‘returned to savagery’. The missionary was pleasantly surprised by the state of the island where ‘many coconut trees which are already productive’ had been planted. The provisional chapel built by the Mangarevans had ‘fallen down’ a long time previously and been replaced.

While he was in Fakahina, Father Montiton decided to establish a new church at Hokikakika, a place seemingly occupied by a large community of Fakahina prior to the Paioire episode. The reasons for such a choice may be multiple and would include both practical and psychological incentives. Within such a constraining environment, the presence of the only passage in the atoll had likely attracted people early on. The channel not only provided easy access to important marine resources, as shown by three large stone fishing weirs, but also served as a line of communication between the ocean and the lagoon for canoes and small boats. Moreover, the reef flat facing Hokikakika being quite large and accessible, the landing of material and supplies for the construction work, as well as the quarrying of coral blocks could be facilitated. Additionally, one can imagine how some Fakahina were still traumatised by the 1860–1861 events. By bringing them back to a familiar location, the Fathers may have tried to ease the process of reappropriation and helped them to gain confidence in the missionary project. At the same time, this decision would also reflect common missionary strategies aiming to eradicate aspects of traditional life, and religious beliefs in particular. Being aware of the location of the old *marae* Varokia in this area, they may have seen the opportunity to demonstrate the superiority of the Catholic faith over pagan practices. The exact location of the *marae* Varokia currently remains unknown, but it is possible that the first chapel was erected nearby or on top of it – just like the Catholic church was built on *marae* Poueva in Reao.

Opportunities for visits increased during the following years thanks to the acquisition by the Tuamotu mission of its own schooner, the *Vatikana*. In April 1870, Father Montiton returned for three days along with about twenty islanders who lived in the predominantly Mormon island of Takume. During this short sojourn, Father Montiton made arrangements for repairing the chapel while planning for a school and a new, stone-built church. Upon his departure, he left the catechist Athanase Tuamea and his family, who he had brought from Tahiti, in charge of carrying on religious education. When he returned in 1871, Montiton found the inhabitants ‘as uninstructed and reluctant to take on the construction of the church’ as when he brought the Tahitian catechist (1873:375). The local lack of religiosity became concerning for the missionary, as was the risk that Mormon rivals might gain ground. This situation led him to stay a few months ‘to organize and somewhat strengthen’ the Catholic community (*ibid*). By the time he returned to Fakahina, he had almost certainly gained much experience

7 In missionary sources, ‘heretic’ referred to atolls where the population was mostly Mormon, like Takume and Hao; ‘pagan’ referred to atolls where traditional beliefs were still in place, like Napuka in the mid-1860s.

in neighboring atolls, especially on Tatakoto and Fangatau, where he had planned the layout of new villages and supervised their creation. For the missionary, the construction of religious and secular buildings went together with the plantation of coconut trees (the ‘providential tree’), also ardently supported by the influential Bishop of Tahiti Étienne ‘Tepano’ Jaussen. Undoubtedly, Father Montiton transferred some of these ideas to Hokikakika.

In Fakahina, Father Montiton said inhabitants could not settle in the existing ‘village’, its lands having been appropriated by a so-called chief (*roitelet*). They either slept under the stars or in ‘miserable huts’ by the lagoon shore (*ibid*: 376). Hence, during his stay, Father Montiton endeavoured to design a ‘proper’ village at the pre-existing settlement of Hokikakika. The first action was to define two main perpendicular access routes that were levelled out and lined with coconut trees, and to dig three wells in the area. Along these roads, the missionary with the elected chief and councilors assigned a piece of land to every head of family and to single young men, who erected ‘little bungalows’ (*cases*) and planted coconut trees. Father Montiton does not mention the construction techniques then adopted. However, in the case of Fangatau, he specified (1873: 281) that ‘each family was able to make, on each side of the two paths provisionally traced, enclosed bungalows, separated and properly set apart from one another’. One of his main objectives, in addition to grouping the population around a Catholic place of worship, was to break ‘primitive promiscuity’: ‘In the past, they lived and slept pell-mell, under hangars open to all winds’⁸ (*ibid*).

The old, 1860s chapel had become too small for the population of 150 inhabitants (36 Fakahina had recently returned from Takume and Makemo on an American whaleship [Montiton 1873: 381]). It was consequently repaired and extended, but Montiton also proposed to build a new one, using coral lime, that could later be turned into a school house, once the construction of the stone church had been completed. The chapel/school house and church were built at the same time, and the lime wall plaster was made from a single lime kiln. Women and young girls gathered the coral material while the young men cut the wood, with the help of stonemason apprentices (Gabriel Hina, Joachim Fatoga, Benedito and Félix) that Father Montiton had brought from Hao, Fangatau and Tatakoto. Together with catechist Athanase, they were in charge of leading the working groups. Coral lime was also used for the construction of a *fare himene* completed in 1870 and mentioned by Father Audran (n. d.), who describes it as a house of lime mortar construction with a plaited pandanus leaf roof.

Aiming to ameliorate memories of tragic events and hoping to re-present the past, thus hoping to suppress feel-

8 While this could be seen as an attempt to plan a village promoting Catholic faith and its social imposition of Western-style nuclear families, Montiton’s testimony remains evasive on the matter.

ings of anger or revenge, Father Montiton made the population clear and level out the coral islet where locals had been captured, and some killed, in 1861. Here, they built a low semicircular wall of drystone masonry and erected a calvary⁹ (the *motu* itself is now referred to as *karavari*). On November 12th 1871, the islet was blessed in the presence of the whole population. In June 1872, the missionary finally left the island for Fangatau and Anaa with Athanase and most of his stonemasons. One was left behind to oversee religious and educational duties, and complete construction of the church roof frame. The new church was consecrated on June 29th, 1873, by Father Fierens, under the patronage of Saint Nicolas (Audran n.d.; Fierens 1874: 384).

Hokikakika from the 1870s to the early twentieth century

While the foundation of Hokikakika’s *mission* is known with a certain precision, there is little information on the three following decades, during which houses made of coral blocks and lime were gradually built. The exploitation of coconut trees continued and developed in the 1870s and 1880s. After a visit in 1885, Bishop Marie-Joseph Verdier (1885) welcomed the positive results achieved in Fakahina where, according to him, inhabitants enjoyed ‘an honest affluence obtained through the sale of coconuts and the breeding of certain farm animals introduced by missionaries’. He made enthusiastic comments about both the village and its inhabitants:

It is enough to see the robustness of the people of Fakaina, the growing number of this population, the cleanliness of the streets, the decent clothing of islanders (which is certainly not the case everywhere), the air of happiness that shines on faces (see Janeau 1890, for similar comments).

In a tour report dated October 23, 1900, the Tuamotu-Gambier Administrator indicated that copra was the only production on the atoll. He also noted that ‘the island is entirely planted with coconut trees’ and that Fakahina produced 250 barrels of copra per year (Administrateur des Tuamotu-Gambier 1900). At this time, Fakahina was considered more prosperous than most of the eastern atolls.

9 Originally, Calvary is the English-language name for the hill (also called Golgotha) on which Jesus was crucified. By extension, the word has come to designate sculptures or monuments representing the crucifixion and erected in specific locations. In areas of the Pacific under Catholic influence, the missionaries often used calvaries to Christianise a place with an important pre-European sacredness/history (Barbe 2020: 577). In the particular case of Fakahina, the calvary was erected ‘so that the memory of Golgotha’s great victim could serve to all as a mean of resignation and as an eloquent lesson of forgiveness for offenses and of love for their enemies’ (Montiton 1873: 377–78).

The inhabitants had ‘a lot of pigs and poultry’, bred many dogs for food, and paid their taxes. On the nearby island of Fangatau on the contrary, there were ‘few coconut trees’ at the same period and the dwellings were ‘only huts made from coconut leaves or pandanus’: ‘if they wanted to bother to plant coconut trees, in a few years Fangatau would become as rich as Fakahina’ (*ibid*).

The Fakahina nevertheless had to leave their village following a series of dramatic events. The island was first affected by a powerful storm surge, most probably caused by a cyclone in January 1903. According to some oral accounts¹⁰, the whole atoll was submerged except for Hokikakika. The Fakahina have attributed their salvation to the resident catechist, who organised a ceremony in the sea and then offered his life and that of his family to God to stem the rising water (all of these individuals died shortly afterwards, according to these accounts). Fakahina was also affected by an epidemic which caused numerous deaths. Father Isidore Butaye (1904) who served in Fakahina at the beginning of the twentieth century offered the following testimony in February 1904:

Spared by the cyclone or almost as well as Fangatau, the island of Fakahina had its epidemic of measles. Despite the instructions given, the patients drank a lot of cold water. Consequence about thirty deaths. You count two or three phthisical patients victims of their imprudences dragging themselves to the tomb. It is all an upheaval in this population.

According to civil records, there were 25 deaths in Fakahina between mid-February and December 1903, including the 55-year old chief Mahinui Louis a Teagi. However, historical accounts also indicate that the atoll had experienced a population decline for many years beforehand. The previously quoted administrative report of 1900 (Administrateur des Tuamotu-Gambier 1900) explained: ‘The population of Fakahina presents this fortunately rare phenomenon in the archipelago of a continuous decrease as a result of the excess of deaths over births’¹¹. It was these repeated deaths that caused the residents to leave Hokikakika. According to the current inhabitants, the Sacred Hearts Fathers considered that the very site of the village, installed in the heart of a dense forest of coconut trees, was a vector of disease: the place was ‘too hot’, insufficiently ventilated, and had to be abandoned for a more favorable location. The Fakahina then settled on the opposite side of the atoll, at the current location of Tarione. Existing wooden superstructures were moved

10 Information gathered in 2019 field season from Francis Pere, Tarione village.

11 This is also confirmed by civil records which we examined at the Tarione municipality in 2019: 41 births and 54 deaths were recorded between 1887 and 1902.

on rafts made of coconut tree trunks to be reinstalled on the new site. However, the displacement seems to have also been accompanied by an abandonment of the building technique using carved coral blocks and lime – which, according to some, was too ‘tedious’ to implement, requiring both time and a strong, cohesive effort¹². Interestingly, carved blocks from Hokikakika were reused to build the new church’s foundations in Tarione, although the building superstructure was made of wood.

THE ARCHAEOLOGY OF A PA’UMOTU VILLAGE UNDER MISSIONARY INFLUENCE

Today, the remains of Hokikakika village, other than those made of perishable material, are very well preserved. In total, 56 architectural structures have been documented and mapped during the 2018 and 2019 field seasons, over an area of 6 hectares (Figure 2). The village is clearly organised around two main perpendicular access routes, north-south and east-west, corresponding with Father Montiton’s testimony (1873: 376). At their intersection lies the church of Saint Nicolas (V’01 on our plan), consecrated in 1873 (Figure 3). The building is rectangular and the interior consists of a single nave leading to a slightly elevated altar and an adjoining (also rectangular) sacristy. The ridged roof, in the axis of the nave, rests on two gable walls, the west one being the façade (with its lancet-arched entrance), a customary disposition in western European religious buildings since medieval times. Along the nave are five windows with lancet arches on the north wall, and four on the south one.

The church itself, with its two contiguous walled enclosures (to the south), corresponds with what we refer as the *mission*. In the first enclosure is an elongated lime and coral platform, likely to represent the aforementioned chapel/school house. A small masonry house and a nearby construction can be interpreted without doubt as the presbytery and its outdoor kitchen. The second enclosure demarcates the cemetery, which contains a tall, central monument in the shape of a triple obelisk, symbolising the Holy Trinity (Figure 4). The two side obelisks bear the sign of the Sacred Heart of Mary, pierced by a sword, while the central one is adorned with the double heart sign of the Sacred Hearts of Jesus and Mary, symbol of the Congregation. While the *mission*’s enclosure walls, the church and its adjoining large cistern are quite similar to Tatakoto *mission*, the resemblance between the neighbouring atoll and Hoki-

12 Were full-height masonry houses also abandoned for medical reasons, under the guidance of missionaries? It is possible, yet European medical advice during the nineteenth century seems to oscillate between necessary ventilation and the dangers of open spaces. On the one side, closed houses are then regarded as inadequately ventilated and therefore as causes of ill-health in the context of epidemics. On the other, houses ‘open to all winds’ were also perceived as responsible for pulmonary illness (Lesson 1844: 156).



Figure 2. Masonry houses of Hokikakika village, Fakahina.

kakika becomes uncanny when comparing the Tatakoto calvary to the Fakahina village triple obelisk. Slightly larger and looking more robust, the Tatakoto calvary appears to be an architectural prototype for the slightly more elegant one in the Fakahina complex. Father Montiton provides a detailed history of the creation of the Tatakoto version in 1871, before visiting Fakahina (1873: 290).

The organisation of the cemetery shows similarities with that of Fangatau. On the latter, Father Montiton had created sand pathways lined with *papa* (beachrock) slabs allowing access to the various parts of the cemetery, a feature also present in Hokikakika. This partitioning appears very closely linked to faith, for Montiton explains (for

Fangatau) that a section to the right, upon entering the cemetery, is dedicated to christened children, while one on the left is accessible to the unchristened, children and adults altogether (1873: 283). This is of course reminiscent of the fate of the two thieves during the Crucifixion¹³. In

¹³ Gospel of Luke 23: 39–43. The difference here is that in traditional Christian iconography, the good thief, who is saved, is generally represented on Jesus's right, i.e. on the left of the picture. In the Hokikakika cemetery, the central monument, while bearing the cross, does not replicate the Crucifixion, for the saved – because christened – children should have therefore been put in the compartment on the left hand side.

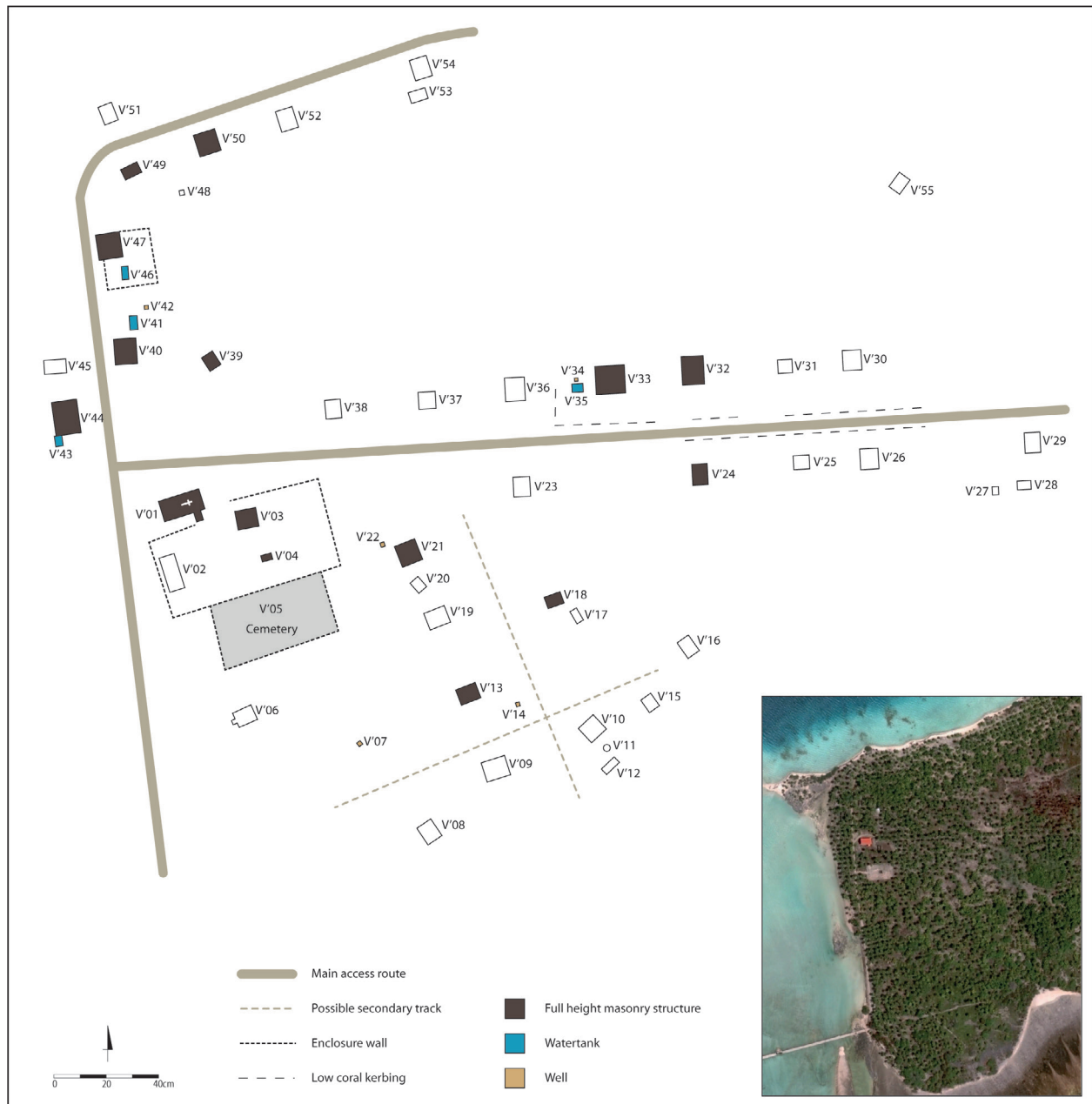


Figure 3. Map of the structures recorded during the 2018 and 2019 field seasons.

Fakahina, childrens tombs are visible to the right, while a seemingly empty space, without any markers and thus probably restricted to unchristened individuals, is visible to the left. The rest of the cemetery consists of two large sections, to the left and to the right of the central monument which include almost one hundred and thirty tombs: they are mostly indicated by stone markers, but coral crosses (some inscribed, with dates ranging from the 1870s to 1909) and rectangular compartments or flat slabs also exist.

The presbytery (house V'03) itself is a small rectangular masonry house near the church. While it resembles the houses later built in the village (see below for details), its

defining feature is a peculiar roofing technique, made with a latticework of branches covered with lime mortar. This resembles the technique used for the roof of the cathedral in Rikitea where Mangarevans used the local *kākā'o* reed, *Miscanthus floridulus*¹⁴. The twigs used, while now absent, appear as negative impressions in the large lime fragments observed on the ground. Moulding these imprints could help us identify the varieties, but the inventory of contemporary flora on Fakahina (Jacq *et al.* 2011: 25–6) narrows the possibilities to two main species: 'ū'ū (*Suriana mar-*

14 Philippe Plisson, personal communication, 2010.



Figure 4. Central monument, Hokikakika cemetery. The double heart symbol is visible on the central obelisk.

itima) and the more durable *mikimiki* (*Pemphis acidula*). The presbytery's link with the Gambier archipelago does not stop here: traces of blue pigment were observed on the wooden remnants of the house's windows. In Rikitea, Commander de la Motte-Rouge explains that 'only a small number of the houses bear, on the doors and windows, this layer of blue paint which the Mangarevan seems to love and which is the final touch to his work' (1871: 21).

Housing

Beyond the *mission* itself, Hokikakika village is represented by a small number of masonry structures distributed substantially along its two main (and perpendicular) roads¹⁵. Some houses display surrounding additions, such as secondary platforms at the back, wells, water tanks, bread ovens and enclosure walls. The latter can be of medium height (approximately one metre) and made of grouted coral rubbles (such as house V⁴⁷) although most enclosures are simply outlined by thin beachrock slabs set on edge on the ground.

¹⁵ Secondary tracks (now invisible) could have existed: a north-west/southeast track along constructions V²¹, 20, 19, 13, and a southwest/northeast track along constructions V⁰⁸, 09, 10, 15 and 16 (Figure 3).

The houses themselves, while impressive in their craftsmanship, are generally of small dimensions: the indoor habitable space consists of one room without interior secondary walls (although wooden partitions could/seem to have existed, such as in the presbytery).

The archaeological remains testify to two types of house construction. These are represented by:

- Raised masonry foundations of rectangular plan, 40 to 60 cms high in most cases, which correspond to sub-floor areas beneath the house superstructures. The latter, of small dimensions (6 × 8 m including verandas, with interior spaces of 20 m²) were originally made of perishable material (plaited reed or wooden planks, and thatched roofs), and were built on top of such coral and lime foundations;
- Full masonry structures, which seem slightly more recent¹⁶, for they are positioned at the periphery of the village (to the north, to the east, and to the south-east). The gable walls often bear the traces of later modification, representing evidence of transformation. Most of these houses are considerably larger than the those of the first category (9 × 10 m including verandas, and interior spaces of 40 to 50 m², sometimes even more).

In the first category, the foundations visible today generally consist of three separate compartments, which mirror the organisation of the overlying house superstructure. Facing the main street is the first compartment, which outlines the front veranda. The central, larger space is linked with the house interior, while the third compartment, at the back, once supported a back veranda. On the majority of houses (V⁰⁶, 10, 15, 16, 19, 23, 26, 30, 31, 38, 52, 54), the veranda compartments at front and back were filled with small coral nodules and covered with lime floor plaster. Thus, only the interior space was covered with a wooden floor. In others, the masonry structure consists of three separate voids, indicating the presence of wood joists placed above the sub-floors and covered with planks, forming a continuous wooden floor between the exterior and interior. The imprints of the floor joists, of rectangular section, and the size and shape of wooden posts supporting the veranda roofs are clearly visible. These may attest to the regular supply of standardised materials (planks, joists, nails and probably corrugated iron sheets, see below) all the way to the eastern Tuamotu in the last decades of the nineteenth century.

Furthermore, the presence of only a front and back veranda, rather than a fully surrounding one suggests that the two walls, perpendicular to the street, were gable walls. This means that the wooden houses could have served as a model for the – probably later – masonry houses (see below).

While the masonry technique involved in forming the

¹⁶ Some of the masonry houses bear dates on their façade, ranging from 1877 to 1892.

raised foundations can be compared to an *opus incertum*¹⁷ in most cases, house V'30, and to a lesser extent V'39, show the use of coral slabs laid on edge forming a decorative cladding, filled with medium-sized coral pebbles. While the *opus incertum* technique can be linked with either imported know-how from European masons or from traditional Society Islands *marae* building traditions for instance, the slab-cladding technique is reminiscent of traditional *ahu* platform building traditions found in central Polynesia, notably in the Leeward Islands and of course in the Tuamotu archipelago (Molle 2015) (Figure 5). This is quite interesting, because it suggests that part of local traditional knowledge was maintained through to early missionary times and intertwined with construction types generally perceived as fully emblematic of the colonial period and of Western influence.

Even though very little information is available about houses in nineteenth century *pa'umotu* Catholic villages, Commander de la Motte-Rouge's description of Mangarevan housing conditions in 1871 reveals significant similarities. In Rikitea, he wrote that they were:

similar to what [he has] seen in Papeete, rather nice little houses, where the wooden floor lies on masonry piles approximately 50 cm above the ground. Walls are formed by pine wood vertical studs linked by cross beams in between which a substantial amount of lime and sand is applied to some sort of reed lattice. The framework is light and supports a pandanus leaf roof (1871:21).

17 The term refers to a type of masonry (present in yet not restricted to areas under Roman influence), the face of which displays rubblework, i.e. unsquared stones not laid in courses.

The second category of dwellings corresponds to full coral and lime masonry structures. Sub-floor spaces are also present, but the habitable space is here contained within full-height stone walls. At the corners, stressed quoins vary greatly in size, with the larger examples measuring up to 70 cm in height. Quoins are also used for openings (windows and doors), topped by large monolithic lintels, on which dates were sometimes carved, notably above the doors¹⁸ (Figure 6). Sometimes, above these lintels are discreet relieving arches. The rest of the walls are made of coral rubble, more or less detritic, bound with a lime mortar, in which charcoal pieces are clearly visible. This suggests a lesser quality lime produced *in situ* in kilns consisting of open pits, using considerable amounts of firewood, as reported by Father Montiton (1873:377). The construction process of the walls can be seen through the successive layering of random-coursed masonry made of rubble and small angular coral pieces (which most probably derive from the shaping of the large quoins): the courses evidence the timber formwork used in the construction of the walls, an installation then reproduced higher up several times (Figure 6). The masonry is otherwise very homogenous, with the noticeable absence of exogenous material (glass, brick or tile fragments, even non local stones for example) within the mortar. This differs from other contemporary construction elsewhere in the Pacific, and reveals both the quality of the craftsmanship involved and the scarcity of exogenous material, which was probably dedicated to other

18 In the particular context of missionary influence, the dates which can be observed on some houses –while reflecting the adoption of Western approaches to measuring time– are direct references to the number of years since the birth of Christ.

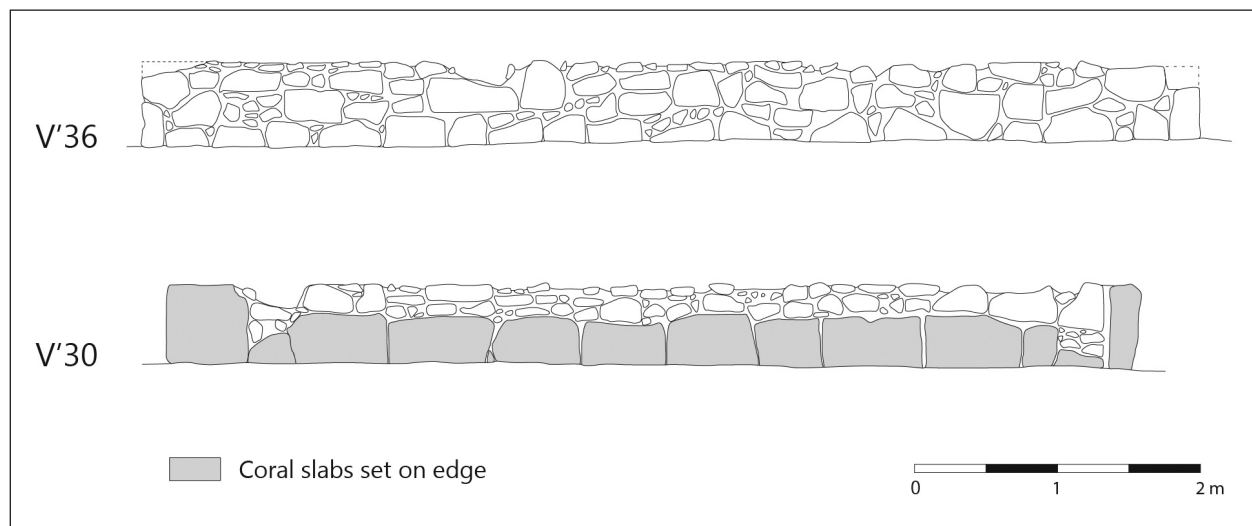


Figure 5. Differences in building technique used for construction of the raised masonry foundations.

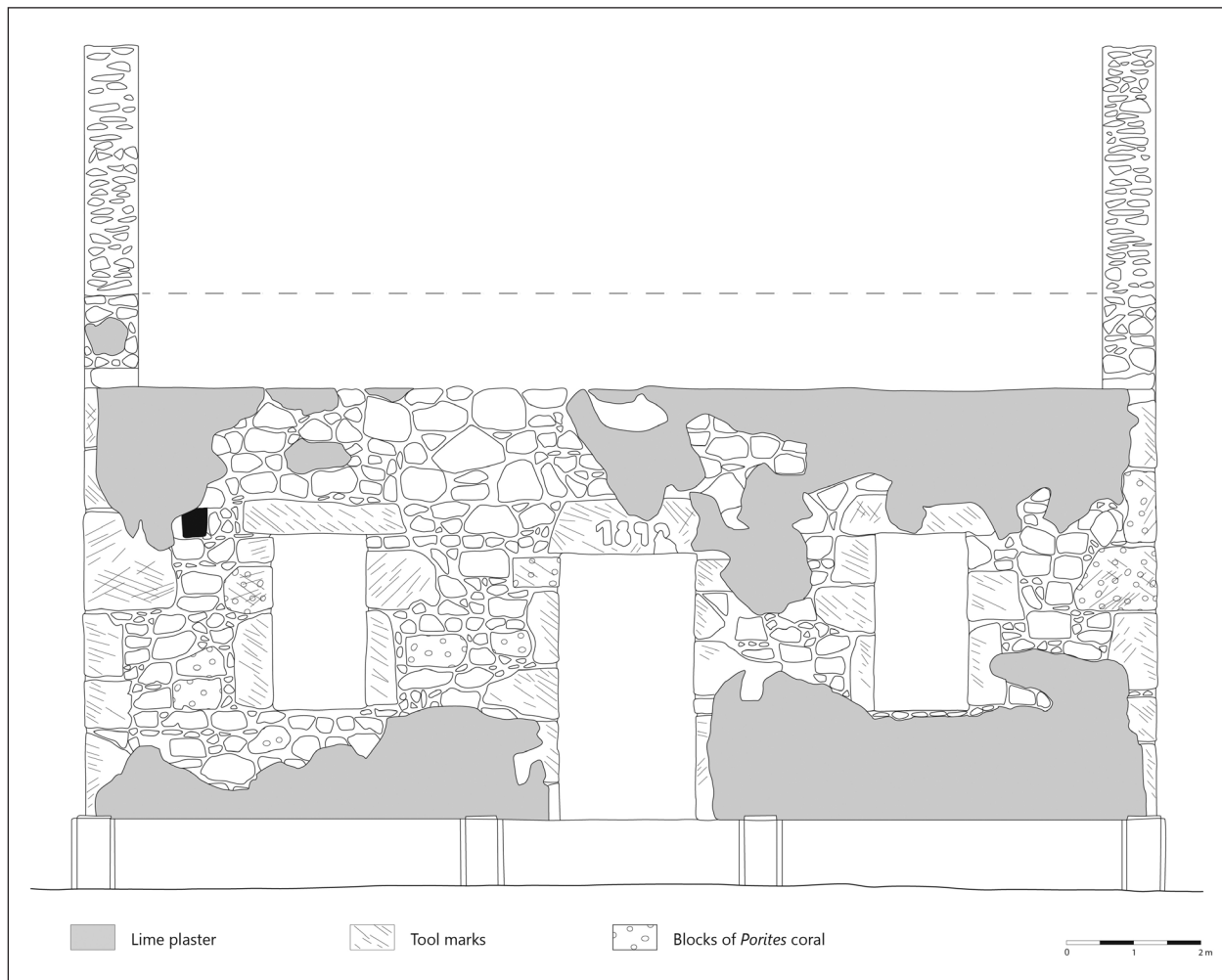


Figure 6. Main façade of house V'50.

purposes (such as glass fragments for cutting and bricks for earth ovens for instance). Of course, these remarks on construction sequences are based exclusively on structures where the lime wall plaster has gradually washed away. Some houses still bear an almost intact coating (Figure 7), but it is probable that construction techniques were identical in these particular cases. Here again, links with the Gambier archipelago, where stone construction was arguably developed more than anywhere else in French Polynesia, seem to prevail: the particularly high number of full-masonry houses may reflect the prolonged contacts with missionaries and converted islanders in Mangareva during the exile phase¹⁹.

Secondary features

Some of the masonry houses are associated with nearby features, such as water tanks (V'35, 41, 43, 46), a bread oven

(house V'50), outdoor enclosures and wells. The standardised structure of the four water tanks is that of a semi-interred basin, originally covered with a roof. The water collected from the house's roof *via* the gutters was probably conducted into the basin through a metal spout (Figure 8), but the tank roof also allowed rainwater collection: on three of the basin's walls is a small gully, which carries water to two little interior ducts, leading to two limestone spouts which pour the rainwater into the tank. The covering of basin V'41, next to house V'40, was probably a ridged metal roof, but the roofing of basins V'46, V'35 and V'43 bear evidence of lime-mortared wattle, forming a dome somewhat similar in shape to that of a bread oven. The lime mortar matrix is still visible today in large fragments, even though the wattle itself has disappeared.

Some houses also display small rectangular enclosures in their vicinity. Without further investigation, they were interpreted as outdoor kitchens, a standard feature of colonial/creole residences as well as traditional Polynesian architecture (Orliac 2000).

¹⁹ As well as situations of relative wealth induced by copra production, as discussed further below.

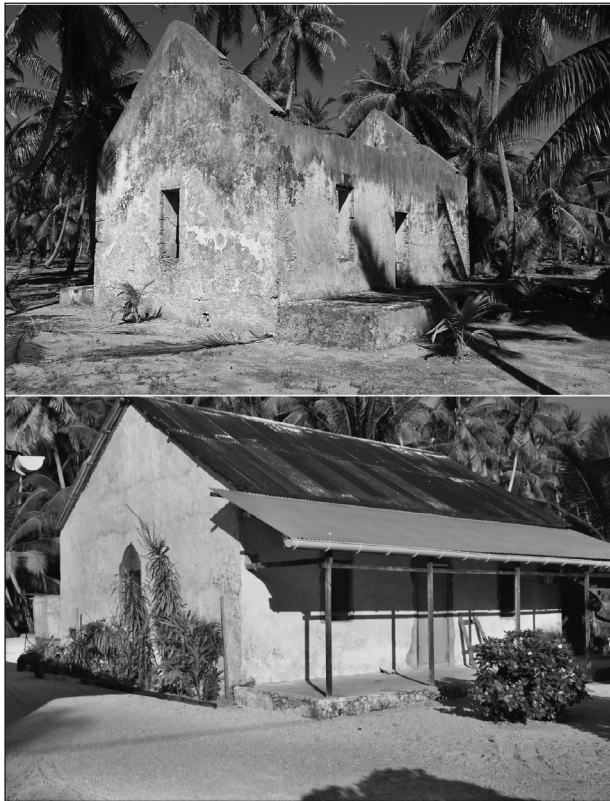


Figure 7. Similarities in house types between Hokikakika village (house V'33, top) and Reao in the early 2000s (eastern Tuamotus, bottom).

Finally, freshwater wells are scattered throughout the village. During the development of the Tatakoto *mission*, Father Montiton showed a particular interest in three of the wells of the newly created village (one by the cemetery, one by the church and the last at the end of the road). Next to each of them, he erected a wooden post covered with coral lime, on which he carved the Sacred Heart symbol. On each side of the well, two other posts were ornamented with leaves and garlands that were replaced every Friday. Such a symbolic action from Montiton is interesting as it turns the wells, which are very important features in the life of the villages, into processional stops where people would pray and sing (1873: 291, 293). Montiton admitted his personal taste for conducting religious processions in the villages, facilitated by the roads and 'boulevards' which the missionaries created. In Fakahina, five wells have been formally identified: three are relatively close to one another, to the south of the *mission* (V'07, V'22 and V'14) and form a north-pointing isocles triangle in plan (see Figure 3). The remaining two are located to the north (V'42) and to the east (V'34). While the former seem linked to the *mission*, the latter appear as somewhat more 'private' structures, in the proximity of houses V'40 and V'33. No evidence of posts as in Montiton's testimony has been found alongside any of the wells, yet we can infer that similar processions

occurred: the water supply in the Tuamotus being a important issue, it is probable that these structures were highly symbolic and closely linked with faith²⁰.

EVOLUTION OF HOUSING AND FURTHER DEVELOPMENTS

In the earliest phases of the Catholic village, the roofs were very likely in coconut/pandanus leaf thatch, a traditional element applied to an otherwise already Europeanised house form. However, observable traces today in Hokikakika, including surface finds, testify overwhelmingly to the use of corrugated iron sheets, with rusty fragments still in place, washers for their attachment, and purlins with evidence of nailing. As a durable and easily replaceable material, corrugated iron sheets were heavily imported into the Pacific islands in the last decades of the nineteenth century as exemplified in the Loyalty Islands, New Hebrides and New Caledonia (Flexner 2016; Boulay 1990; Lagarde 2020b). One must also consider a significant advantage of corrugated iron over thatch, in the context of atolls. While corrugated iron is often perceived as impractical because of the lesser insulation it offers, it allows the efficient collection of rainwater, which can then fill nearby water tanks.

Thus, two photographs dating to the 1950s show a house at Tarione which is considered to have been transported from Hokikakika at the turn of the century: the house was a colonial bungalow with weatherboard walls, corrugated iron sheet roof, featuring a main door topped with a transom window bearing, as the veranda's railing, elegant and detailed timberwork. The house is typical of late nineteenth century colonial architecture in French Polynesia (Sacquet 2004).

Of course, this does not infer that all houses in Hokikakika which are now known only through their original masonry foundations were exactly similar, nor that they had been this way through the whole chronology of the Christian occupation of the site. One of the main aspects of colonial/creole architecture is its evolutionary nature. Wooden houses are fragile and need constant repair, which can turn into improvements or upgrades over time. It is possible that the original houses²¹ built in the early days of the Hokikakika Catholic village indeed bore lattice walls, light framework and thatched roofs. Over time, with the rise of copra economy, one can safely assume that the use of wooden boards became standard. Concerning corru-

20 The possible existence of secondary tracks in the southern part of the village gives further importance to wells V'07, V'14 and V'22 (see Figure 3) and the potential processions linking them to the church.

21 Here, the dwellings referred to as *cases* by Father Montiton. He clearly opposes *huttes* (or huts), which refer to the traditional pa'umotu houses, to *cases* (or bungalows) which he uses for the new houses constructed (1873: 281 and 376). On the use of *case*, see Lagarde 2020a: 242-57, especially p. 246-47.



Figure 8. House V'44 with its adjoined cistern, Hokikakika (top); Makemo municipal building, 1967 (bottom), for comparison (source Tahiti Heritage).

gated iron sheet roofing, its progressive use is probably contemporary with the construction of some masonry houses, which date to the 1880s and 1890s, and where only standardised timber elements were in use on the verandas and where no evidence for the use of thatch is now visible. Yet, the Administrator for the Tuamotu, during his 1900 visit, noted that the village was 'pretty enough, the houses are clean and regularly aligned. There is a large number of masonry houses covered with pandanus' (Administrateur des Tuamotu-Gambier 1900). In this, it is unclear whether the latter refers to both masonry foundation buildings and full-masonry houses. More certainly, the masonry houses with adjoining cisterns probably only ever had corrugated iron roofs, to facilitate rainwater collection.

Some gable walls, such as on houses V'44 and V'50, show evidence of change in the angle of the roof framing. At first, the main roof was connected to that of the veran-

das. In later years, the main roof was disconnected from the verandas' framework by raising the sides of each gable wall and keeping the central height identical, thus lessening the pitch of the roof. This enabled a row of small openings to be created in the tops of walls previously enclosed by the front and back verandas. This may have allowed constant airflow in the houses, with the effect of diminishing inside temperatures.

Lastly, both the raised masonry footings and the full masonry houses throughout their history of development display a clear use of the metric system, especially in the dimensions of doors and windows, the width of verandas, as well as in the imprints of veranda posts. While this is consistent with a Catholic (and therefore French) influence, it also demonstrates that metric measuring tools were present during the construction/improvement/extension phases of the structures. This rules out any kind of influ-

ence from the imperial system (which may have been in use, for example, on atolls under Mormon influence, or elsewhere in the English-speaking Pacific) but also lessens the part played by traditional know-how in the successive building phases of the village. Thus, it seems that the standardised components which reached Fakahina at the time were manufactured in French territories or in places where the metric system was in use.

The Christianised village of Hokikakika, at the turn of the century, probably appeared as a mostly Europeanised habitat organised around the *mission*. To this extent, the analysis of surface archaeological material will eventually offer a better understanding of the commercial relations between Tahiti, the Tuamotus, France, but also Asia, Australia and New Zealand. While the majority of earthenware elements (mainly bowls and plates) in Hokikakika bear the classic markings of French large-scale manufacturers of the latter part of the nineteenth century (J. Vieillard in Bordeaux, H. Boulenger in Choisy-le-Roi, Keller et Guérin in Lunéville), which is consistent with the growing French influence on the Pomare kingdom and the passage from a Protectorate to French colonial rule in 1880 (Figure 9), some foreign markings also exist, such as a double phoenix

motif with a *НКТ* acronym. It belongs to the *Nihon Koshitsu Toki* earthenware factory, the first Japanese company to massively export its ironstone-type, china-like production in contemporary times. The glass artefacts (bottles, drinking glasses, kerosene lamps, glass pendants from chandeliers, pharmaceutical and cosmetic bottles) show diverse origins, some French (the majority, with wine, absinthe, LT Piver or Roger et Gallet perfume bottles), but also from the English-speaking world (Scott's emulsion of cod liver oil or Davis' vegetable painkiller, for example).

The surface collection of archaeological material (Table 1) thus testifies, if not to refinement, at least to the taste in exogenous products deemed useful or even fancy or luxurious by the Hokikakika residents. The economic situation of Fakahina atoll in early colonial times must therefore be reconsidered within a rather successful *co-pra* economy. Evidently, and despite the absence of the income from pearl harvesting, Hokikakika villagers of the late nineteenth century clearly took an active part in an already globalising world. In their own way, they testify to the remarkable agency of Pasifika peoples, who have too often been seen by scholars as passive spectators of their fate in early colonial times.

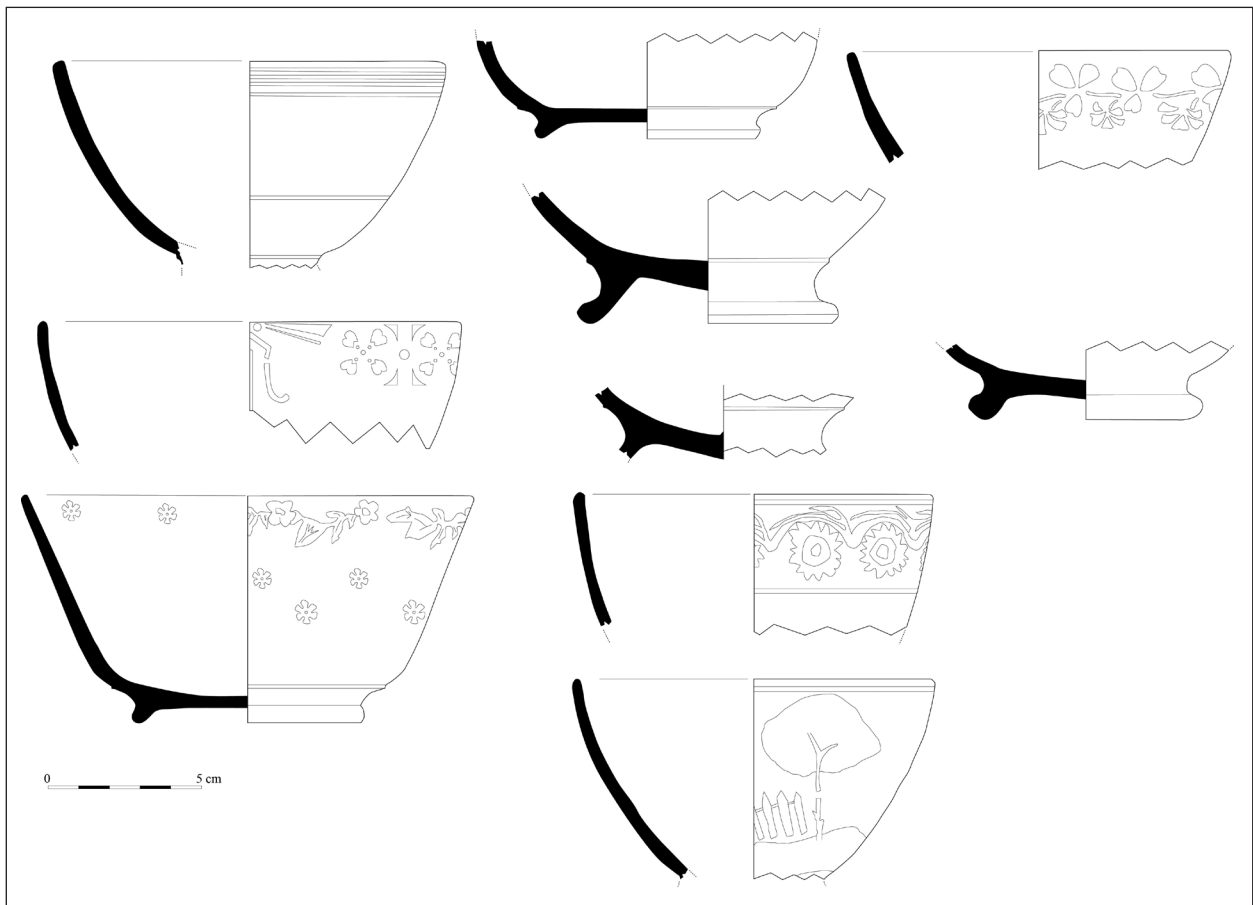


Figure 9. Sample of bowl fragments collected at Hokikakika during the 2019 fieldseason (Image prepared by Jean-Marie Wadrawane).

Table 1. Summary of artefacts recovered from Hokikakika village.

Artefacts from Hokikakika village	Glass	China	Stoneware	Earthenware	Metal	Shell	Brick	Stone	Total
Numbers of artefacts per category	81	8	6	152	2	1	1	2	253
V'03				1					
V'15	1								
V'16	2					1			
V'21	2	1	1	8					
V'29	2			8					
V'30	2								
V'32	3			3					
V'36				4					
V'41	1			1					
V'44	1		1	5					
V'48				3					
V'50	4			2					
V'51	3			3					
V'55	28	2	2	52				2	
Precise collecting zone unknown	23	1		8	2		1		
Minimal numbers of artefacts after refitting	72	4	4	98	2	1	1	2	184

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