ARCHITECTURAL CONSERVATION INTERVENTIONS ON THE ROCK-HEWN CHURCHES OF LALIBELA, ETHIOPIA

A study on traditional conservation skills and local communities’ reactions to the UNESCO’s preservation interventions

エチオピア・ラリベラの岩窟教会群における建築保存活動：伝統の保存技術とユネスコによる保存活動に対する地域コミュニティの対応に関する研究

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This study is about the architectural preservation tradition on the World Heritage site of Lalibela rock-­‐hewn churches of Ethiopia. The traditional conservation knowhow and skills, their role in the preservation of the heritages, and the local community’s involvement on the preservation efforts from 1950s onwards, are the main focus of the study. Field research, key informants interviews and literature study were primary data gathering methods used. It is apparent that, there was a traditional architectural conservation know­-­‐how and skill that keeps the rock­-­‐hewn churches and the associated intangible cultural assets living intact under heavy mankind and environmental burdens. But, the arrival of the national and international conservation interventions estranged the local knowledge and skill. Thus, the local traditional know­-­‐how and skills began to disappear and the community to feel excluded from playing its rightful role on the preservation of the heritages, by and large, belongs to him.

Keywords: Traditional knowledge, Craftsmanship, Heritage preservation, Rock-­‐Hevon, Lalibela and Ethiopia

伝統の保存技術，職人の技能，遺産保存，岩窟，ラリベラとエチオピア

1. Introduction

1.1. Background

Lalibela is a small town in the mountainous region of the Northern Ethiopia Highlands. It is located in the district of Lasta, the Amhara Regional State of Ethiopia. The town is named after the 13th century Emperor of the Zagwe Dynasty, and the mythical builder of the Rock-­‐hewn churches, King Lalibela (Tadesse, 1972; Phillipson, 2007). The 11 Churches (see fig 2, for the list of the names on a site plan) were hewn from a living rock with the earliest around 800 AD and the latest in the 2nd half of the 13th-century, (Phillipson, 2007, 2010). The churches are situated in three clusters, surrounded by a village with vernacular buildings of circular-­‐shaped and thatch roofed dwellings.

In 1978, Lalibela churches have registered as a World Cultural Heritage (WCH) fulfilling criteria I, II, and III, i.e. (i) the unique artistic achievement manifested on execution of the churches, the size, variety and boldness represented by their forms; and the quality of the workmanship; (ii) the intangible cultural assets interconnected with the presence of the churches architecture, and (iii) as unique testimony to the Ethiopian medieval Christianity and civilization (ICOMOS, 1978).

Lalibela churches are living heritages which are in service of their original purpose, to this date. The earliest record on the churches was by

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Fig. 1 Map of Ethiopia. Prepared by the Author
the Portuguese travelers in 1520s. Deterioration on the buildings was witnessed since the late 19th century. An intensive, and in most cases inappropriate physical interventions were taken in the churches, since the first quarter of the 20th century, according to the local memories and rare accounts. From the mid 1950s five major conservation*† interventions had been executed on the churches. Thus, this paper will examine the interventions with a focus to the latest one and on the ongoing public debates.

1.2. Objective of the Study

The objective of this study is to examine the local communities’ reaction towards the preservation interventions by the International institutions for conservation and preservation of the World Cultural Heritages of the Rock-hewn Churches Lalibela since the 1950s. The specific objectives are to find out

- How the impacts of the preservation projects were perceived from the local community’s perspective;
- How traditional conservation knowhow and skills were addressed by the national and international players; and
- How cultural and religious assets of the site and the local community’s role were integrated in the preservation process.

1.3. Research Methods

In order to achieve the objectives of the study, a combination of approaches and data gathering methods were applied. A qualitative research method was used as a principal method. An observation of the research sites and key informants interview and discussions with the members of the local community and the clergy was held in 2013 and 2016. Inputs from personal experience*‡ to the sites by the primary author are used to see the research problem in perspective.

A review of relevant literature, heritage conservation laws and conservation projects report were conducted to find out the facts and figures related to the research. To have an in-depth look of the case, a field research to the sites in Lalibela was in effect in 2013. In 2016 an interview with experts from the Authority for Research and Conservation of Cultural Heritages (ARCCH) of Ethiopia was conducted. Discussions and unstructured interviews with potential informants and individuals actively engaged in the field of architectural heritages research and preservation, and with the members of the clergy were conducted in June 2013 and May 2016.

The discussions were considered in analyzing the results. A snow ball method was used to reach individuals with the better knowhow of the traditional preservation techniques and the local history of the rock-hewn churches of Lalibela and Tigray.

This paper is structured as follows: a brief outline of the interventions by the international and national players in the conservation and restoration efforts of Lalibela Rock-Hewn churches presented first. The local communities’ opinion towards the interventions and discussion of the tradition know-how and skills will follow. Then, the analysis of findings and the conclusion and remarks will follow.

2. Outline of Conservation Interventions in Lalibela since the mid 1950s

In the mid 1950’s, the first organized effort to preserve the Rock-hewn Churches of Lalibela initiated by the Imperial Government after a century since the beginning of the modern Ethiopia history, 1855 (Pankhurst, 2005; Beyene, 2010)*‡. In 1956, the Ministry of Public Works sponsored a “restoration” project given to the Italian Sebastian Console (‘Tsehay, 2013). Console, like his predecessors introduced new materials like cement and tar to the roofs and walls of the monolithic churches. By the 1960s, due to the hash interventions of the past, from 1920, 1954 and 1956 and 1958-59, the roof of Biete Medhane Alem was covered with the layers of Tar, Cement and corrugated iron sheet (International Fund For Monuments, Inc., 1967). The roof of Biete Amanuel, and Biete Mariam were also covered with tar and cement and the walls were partly covered with cements, tar and painted with red ocher. The color was used to matching the maintained part to the natural rock (ICOMOS, 1978). The corrugated iron sheets were bolted to the roofs in the attempt of protecting water leakage in 1956 to Biete Medhane Alem, and from 1958 to 1959 to

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[Diagram: Site Plan of the Rock-hewn churches of Lalibela, Prepared by the Author in reference to Angeine, 1967]
Biete Amanuel and Biete Aba Libanos.

In 1966, a restoration project for Lalibela on a joint fund of the World Monuments Fund (WMF) and the Imperial Government of Ethiopia was launched (World Monuments Fund, 1996). The main mission of the project was to reverse and correct the damages induced by the preceding intervention (International Fund For Monuments, Inc., 1967). UNESCO was engaged in the facilitation of the project and the funding, with the invitation of the Crown Prince Mereed Asfawassen in 1965 (Beyene, 2010). To UNESCO, it’s participation makes it the first intervention by international institute to the site. The project was supervised by Architect Sandro Angelini**4, (ASSEFA, 2013: Beyene, 2010). The tar and cements from the previous project were removed and replaced with a mix of crushed local stone and neutral cement. Iron rods were used to bond shifting rocks and the corrugated iron sheets bolted to the roof of the church removed and a heavy layer of natural cement used in place. A water repellent solution was also added to the monolithic roofs to prevent further water damage (International Fund For Monuments, Inc., 1967: ICOMOS, 1978).

By 1989, the mural paintings of 5 churches were severely damaged due to the water leakage (Tsehay, 2013, Gebresellassie, 2013). Thus, the Ministry of Culture of Ethiopia and UNESCO carried out a construction of temporary shelter for the affected churches. A shelter made from simple wood frame and corrugated iron sheet roofing (Tsehay, 2013). This project is considered successful intervention by the members of the local community and the clergy. The response was immediate and the objective was clear: saving the mural paintings from complete deterioration and the churches from total damage until sustainable solution will be found.

In 1995, ARCC with a conservation planning, technical and financial collaboration of UNESCO launched an international movement to safeguarding the WCHs of Ethiopia. Accordingly, UNESCO began its international mission for the churches of Lalibela in 1996 (ICOMOS, 2007). With the finance secured from the EU, in 1997, a joint committee from UNESCO and the International Union of Architects (IUA) held a Temporary shelter design competition. An Italian firm Terzini Associati won the competition; and, in 2006**5 the construction of the new shelter started. The work finished in 2008. It’s been a decade since the new but temporary shelter constructed. Hitherto, the problems in the construction process, the immediate and long term impact of the shelters, and proposed time span for the shelters are topics of debate among the Ethiopian scholars, the conservation experts and the local community.

3. Problem of “Temporary Shelter” Shared among Local Community

The local community**6 and clergies’ opinion on the construction of the “Temporary” shelter, their participation and the traditional conservation and preservation know-how’s role on the preservation interventions are presented henceforth:

3.1. 1950s

Abá Gebresellassie, is a Monk who is serving at the churches of Lalibela for about 50 years. He was interviewed in June 2013 about his opinion on the former and the latest conservation works. He recalled that in the mid 1950s part of the façade of the Church of Biete Aba Libanos, posts on thee porches and one corner of Biete Mariam were reconstructed by foreigners. The roof of the churches had been covered with a black and thick [Tar] liquid and the walls plastered with cement and painted with red color. Soon after, [in 1956] other foreigner with a small group of young Ethiopian [students from the former Building College, in Addis Ababa] came and covered the roof of Biete Medhanealem (see, fig 3) with corrugated iron sheets. In actuality, the iron sheets were bolted to the monolithic roof.

In the 1950s intervention, the members of the clergy and the local community were happy to see the demolished parts maintained. The intention of protecting the churches from water leakage makes them hopeful on the future of the churches. But, the material choice disappointed the local community and the clergy. The use of Tar was totally against the will of the clergy and the local community. The dissatisfaction was that primarily the reliefs on the roof of Biete Medhane Aleme were covered with the Tar (See fig 3 and 4). The color of the Tar [black] has a bad connotation on the traditional-believe system. And, the smell of the Tar was too bad, according to the aforementioned informant. Painting the naturally reddish surfaces of the churches with red color was a horrible surprise to the local community. The use of the Tar and painting the rock surface was proven inappropriate both from the perspective of the local community and its effectiveness as conservation intervention. Thus, in a year the corrugated iron sheets shelter introduced because the tar was failed to prevent the water leakage. The color was also scraped and cleansed away in 1967.

The reaction towards the corrugated iron sheet roof was relatively modest and was welcomed by some members of the clergy. At the time, in Lalibela, only few (maybe less than five) buildings were with iron sheet roofing (Gebresellassie, 2013), mainly public buildings. The remaining dwellings in the neighborhood were thatch roofed, small circular buildings of masonry walls plastered with a mud mortar. Thus, use of iron sheet roofing in these days was considered as a mark of class and privilege**7 by the local community.

3.2. 1966-67

A Priest from Biete Ghiorgis was interviewed on the suggestion of Aba Gebresellassis. His origin is Lalibela, and he is son of a priest. He said that, he grew listing about the churches of Lalibela: accordingly, some of the interventions on the 1960s [1966-67] were welcomed by the local community.
The removal of the tar, the paint and the cement concrete from walls and roof, the restoration of roof reliefs of Biete Medhane Alem’s (see Fig 4) after the removal of the corrugated iron roof were some among the celebrated moves. The clearing of sediment from the drainage network were also highly appreciated. Whereas, during the removal of the tar, the chiseling works was panicking experience to the clergy and the community. The concern was that, the church might be damaged in the process.

The heaviness of the natural cement layer used for the roofs in order to prevent water leakage after the removal of the tar, from the previous project was worry some, and it failed to control the water percolation like the previous work.

3.3. 1989

Water continued to become the main source of problem of the churches. Regardless of the previous efforts, the percolation through the cracks and the roofs and walls continued (ICOMOS, 1978). In the mid 1980s, the damage to the mural paintings reached a point of no return. Water and dampness kept deteriorating the engraved reliefs of the monolithic ceilings. The call from the local community, the consistent pushing from the clergy and urgency from experts facilitated the construction of the Temporary shelter.

In 1989 on the joint efforts of UNESCO and the Ministry of Culture of Ethiopia (MoCE), the shelter had been built from a simple frame of wood and corrugated iron sheet roofing (see fig. 5). This project is exclusively perceived as success by the local community and the clergy. It was an objective intervention with a clear mission to save the mural paintings and reliefs from extinction (Tsehay, 2013). Mrs. Tshehay, opinion supported by Mr. Hailu, on a telephone interview in 2016, both from ARCCH. One thing emphasized in the discussions was that, the 1989 response was quick and effective though it was conducted while the country was at the apex of the civil war. The project site [Lalibela] was in a proximity to the major battle fields of the armed struggle.

3.4. 1995-2007/8

The latest and major project was from 1995 to 2008. The actual construction of the temporary shelter on the site was in 2007. It was a project to construct a temporary shelter to replace the shelter built in 1989. A joint committee formed by UNESCO, the state party [Ethiopia] and the financer, EU. The design competition of temporary shelter for 5 churches of Lalibela, held between eight European firms in 1997. In 2000, an Italian firm Terpin Associati was announced the winner on a unanimous vote of the jury (ICOMOS, 2007).

On a recommendation of ICOMOS and a joint effort of the World Heritage Center and ARCCH, early in 2006, a major change to the winning design was made (see fig. 6. and 7) by Terpin Associati (UNESCO, 2007). In the mean time, the Italian Edeco Spa and Icom Engineering Spa, in Joint Venture, took the role of contractor for the temporary shelter from the client i.e. ARCCH, on a total cost of 6.3 million Euros financed by EU (ICOMOS, 2007). All in rush, in the same year, the site work for the construction of the shelter and the manufacturing of the parts [in Italy] started. The hustle may have been caused by the expiration of the contract within one year, December 2007, said (Waqtora, 2013). MH Engineering, an Ethiopian engineering firm, was given the role of inspection by the client. The construction of the shelter realized a decade after the project launched with the design competition.

According to the Employee of the Woreda* Culture and Tourism office on an interviewed held in 2013, he said that, the local community and clergy felt excluded in the decision making process on the major intervention to the site they own and administer**. The locals also claimed that, it was their role given to others while the contractor brought skilled and daily laborers from areas outside of Lalibela. On the other hand, the misunderstanding of the local values and the culture of working on and around the churches by the workers came from other places created conflict with the local community. According to the informants, these workers were working on days that are not dedicated to work but for prayer according to the religious tradition. Coming to the churches after consuming food and drink on the fasting days, stepping in and entering to the churches while wearing a shoe which is forbidden in the religion, were some issues aggravated the conflicting interests in addition to the exclusion from the decision making process, as mentioned earlier.

The Priest at the church of Biete Amanuel, interviewed in 2013, confirmed that, a part on the church was damaged due to carelessness of the labors from a falling part of scaffolding. This incident along with the disappointment of the local community on the proposal of placing of the column of the shelter of Biete Aba Lohanos on top of the roof of other church intensified the grievances. Thus, the Woreda administration intervened and helped on bridging the conflicting interest. As a result, the dispute on the column was solved, despite the fact that the contractor kept on relaying on the non-local workers on the project.
According to the interviewees, the *ferenji* [UNESCO] and the federal [ARCCH], they planned and built the shelter without the consideration of the local community and the church’s interest. Neither members of the clergy nor representatives of the community were involved on the decision process. The officials of ARCCH presented the proposal to the church administration after the design competition was over and the winner design was announced. According to the original design, the shelter was anchored to columns placed outside of the church complex (see fig. 6). In 2007, the shelter construction started with its heavy columns located within the church complex; a thing which didn’t exist on the original design presented to the members of the clergy. These changes made the clergy feeling tricked and thought the values associated to the churches are less a priority to the Institutions [UNESCO and ARCCH].

The clergy and some members of the local community believed that, the intention of UNESCO and ARCCH is commoditization of the churches for tourism. They blame them for ignoring the intangible assets. On the contrary, interviewees from ARCCH, local culture and tourism office and tourist guides accused the church administration and clergy for abandoning preservation as their primary role: and, for focusing more on maximizing the benefits from the increasing tourist flow after the registration of the churches as WCH.

The clergy’s tendency is that however, the restoration and preservation of the churches is exclusively the responsibility of UNESCO, ARCCH, and the Regional Culture and Tourism Bureau. They believe that preserving the intangible assets is mainly their role, the church service is theirs. Most of the claims and counter complains of the clergy and the members of the local community are by large ascertained on the interviews held with the employee of the local tourism office and the curator of the church museum too.

![Fig. 6 Original Design shelter Design for Biete Medanealem](image-url)

![Fig. 7 Revised shelter](image-url)

![Fig. 8 Shelter after construction](image-url)

Source: (Fig. 6 and 7 [http://www.europaconcorsi.com/db/rec/concorso.php?id=8981, International Competition, 1997])

### 3.5. Different Opinion of Clergy and Local Expert

Lalibela is a site of living heritage that is not only associated to the memories of the past but to the living practice of present too.

Therefore, the presence of differing opinions on the conservation intervention is expected: as presented henceforth.

**Clergy:**

- The clergy were not expecting a temporary shelter again. The complexity and solidity of the shelter, doesn’t make the clergy believe this work is temporary, for 20 years only, and a permanent solution will come soon in two decades.
- They feel excluded from the entire process from planning to construction: and locating the columns within the main church complex without considering the obstacle to the church services is its manifestation. They preferred the original design.
- The size of the columns creates visual barrier to the facades of the churches and becomes an obstacle to the liturgical services.

**ARCCH Experts and a Local Curator:**

- The shelter structure is too heavy to be considered temporary and the visual distraction too is not avoided (Waqtora, 2013).
- The time span of 20 years is not confirmed from any credible document yet, according to the curator in the museum of Lalibela.
- Actuality of the temporary shelter took 13 years, and it is been 7 [now 10] years since. So that, it is less probable to see the permanent solution realized in 10 years from now, since noting has been heard about the project for permanent solution yet.
- The cracks appearing on the footage of the columns of the shelter, vibration and hovering of the shelters under influence of wind are new concerns to the churches survival. And, the new microenvironment created beneath the shelters has become a refuge for birds that they will leave corrosive guano on top of the church floors. This opinion is shared by members of the clergy too.

### 4. Local Knowledge and Traditional Craftsmanship for Maintenance of Church

#### 4.1 Origin of Lalibela

The local tradition on the construction technique, construction technology and the constructor of the churches of Lalibela is yet shrouded in mysteries. According to liturgical book *Gedle Lalibela or Acts of Lalibela*, (Pankhurst, (2005) as cited in Phillipson, (2007)), the churches were built in the likeness of what he [the king] had seen in the Heaven through a vision, with the help of both men and
angels. Though who those men were and from where they came in the help of the king’s mission of construction these churches are not mentioned. Archaeologists who studied the rock-hewn churches of Lalibela and Tigray suggested that evidences within the church construction tradition of the country show that “they originated from a common but diverse tradition [of rock-hewn churches construction] over a substantial period of time” (Phillipson, 2007). Similar opinion to that of Phillipson, (2007) was mentioned on the 1978 WCH screening report of ICOMOS (ICOMOS, 1978). Ethiopian scholars on the field like Fassil Ghiorgis shared similar opinion.

The tradition manifests the presence of a strong culture of rock-hewing and a local knowledge that helped their survival for centuries. Accordingly, some of the local and traditional preservation mechanisms that were used to preserve the churches from deteriorations mainly caused by water leakage were identified from the interviews. The following traditional methods were some:

4.2. Use of animal hide: Qorbet

Animals’ hide were used as sheltering mechanism to help the churches survive the rainy season and to control water percolation (Bogale, Abebe, and Afe Memhir Mengstie, interview in 2013). The hides were carefully dried and waxed with natural lubricants such as animal fat and bone fluids to give the hide smooth and impervious surface so that to drain the water easily. A skin of domestic animals, specifically of Caw, Oxen, and rarely got and sheep was donated by the local community. It is locally called Qorbet.

A hide from the animal slaughtered for marriage ceremony, in memory of deceased relatives and for festivals of the church and the local community were commonly donated to this service. Most of the ceremonies are on the dry season after the harvesting, according to the tradition. The Quorbet after serving its purpose as a shelter, it wasn’t thrown away, but put into other use. Because, it is considered as a holy material and believed to have healing power. Thus cut in to pieces and distributed to the people in need.

4.3. Lime Mortar: Nora

The possibility of the use of Lime Mortar in Lalibela was investigated from observation and interview. Accordingly, it has been reported that, use of lime mortar was other traditionally practice to protect the churches from water leaking through the monolithic roofs. A lime soil from a nearby village was used for this purpose. The preparation of the mortar, according to the local tradition was taking months. The lime mixed with water, fine residue of a food grain named Teff, Haser and other grains for extended period while mixing it on a biweekly and sometimes weekly to facilitate the fermentation and harmony to get more sticky and improved quality of lime mortar (Interviewees Aha Gebreselassie and Bogale, 2013). This process was also recognized by the Expert in ARCCH according to the interviews. Sandro Angelini also witnessed remains of lime mortar on the roof of Biete Gebriel and Raphael (ICOMOS, 2008)

4.4. Waxing: Besem Meweted

Waxing, Besem Meweted, literally is to mean sealing with wax. It was other traditional practice to control the water leakage through the cracks. The paste to feel the minor cracks used to be made from a mix of organic materials and a wax made from Haney Bee Breads as a main ingredient. It was preferred for its ease, availability and for it helps the water to easily slide down. A trace of such a traditional preservation technique was in existence on the rock-hewn churches of Tigray, until very recent.

The rock-hewn churches of Tigray hidden within the mountain chains of Eastern Tigray, Ethiopia, were unknown to the majority of the international community and Ethiopians too, until the 1960s. In April 2016, a preliminary survey was conducted by the author to the sites of six rock-hewn churches in and around the Gheralta Mountains, where many rock-hewn churches are abandoned. Hence, according to the informants., Wax sealing of the small cracks and use of carefully selected and compacted soil [in most cases lime] on the roof before every or every other rainy season, as the locals acknowledged its performance over the monolithic roofs from the previous rainy season, was in practice until the mid-1980s (Group discussion in the Monastery of Debre Tsion Abune Abreham, 2016).

On a site observation, a trace of lime mortar found on the roof of Debre Tzion, was an instance of the tradition. Traces of the same manner were witnessed by Sandra Angeline in 1966-67, as he found Lime mortar traces on the roof of a church in Lalibela. Use of lime mortar and a layer of carefully selected soil are common practices in the Hudmo House roof protection from water leakage throughout Tigray Region. Hence, use of local available materials for maintenance of the churches was a common practice in the building culture.

5. Analysis

In the 1950s, the interventions were to the disappointment of the local community, in most cases. The problems were, primarily, the local community was ignored in the planning process and its role was limited to working as none skilled daily labored. Secondly, the material integrity, the nature of the material and aesthetic values of the churches were compromised with the interventions. The local values associated to the interaction with the church buildings and the ethics to be strictly followed within the main complex of the church was violated due to lack of understanding and negligence.

A continuous attempt was made to control water leakage as it was the major mission of all the interventions. Four of the five projects were carried out by Italian Firms and led by Italian Architects. This made the intervention Euro-centric, and mainly Italian. With the beginning of the UNESCO led intervention in the 1966 and 67, there was a growing attempt to keep the material integrity
and visual values of the churches; whereas, the avoidance of the local community from the planning and execution process of the preservation interventions continued. The violation of the essence of the place worsened. The interventions were neither appropriate from conservation intervention perspective nor effective in solving the problem of water leakage. Thus, the water leakage remained to be the major problem of the churches to this date.

There is no major intervention recorded on the churches of Lalibela in the 1970s\(^1\) until the late 1980s. It 1989, a temporary shelter which lasted until 2007 was built. This intervention unlike its predecessors and the later intervention, it was welcomed by the local community and appreciated by experts for its simplicity and reversibility. It was entirely constructed by local experts and it was in response of the local community and the clergies’ call and experts’ urgency to safeguard the mural paintings and ceiling reliefs affected by water leakage. The latest of all and yet controversial intervention by UNESCO and ARCH is the shelter built for five churches in 2007 and 2008 with the fund from EU. This intervention managed to control the water coming from the roof but not the water coming from the side walls. It also imposed other dangers to the churches. Primarily, the structure is too heavy to be considered temporary and it is not in accordance with the cultural landscape. It is also dominating the landscape due to its size and its color [white]. The effect of wind on the temporary structures was poorly considered. After all, the local community and the clergies were estranged in the process.

In the local tradition, presence of traditional conservation know-how, skill and active public engagement to protect the churches from environmental and man-made threats was learned from the research. On the other hand, with the arrival of the national and international players, actively engaging the local communities to safeguard the heritages and the exploitation of the tradition conservation know-how and skills was undermined and if not entirely ignored throughout.

Generally speaking, there is a strong desire by the local community to see the churches properly safeguarded from the natural and manmade hazards. The presence of the local know-how and skill on water leakage control and the associated intangible cultural assets was evident though these assets were totally estranged on the interventions took place since the 1950s. As a consequence, the traditional conservation know-how and mechanisms remained poorly understood and only on the memories of few individuals, elderly, and it is on the verge of eradication due to lack of documentation and total avoidance. The local community’s involvement on the preservation efforts, in most cases which were led and organized by UNESCO, was minimal and full of conflicting interests.

6. Conclusion

Active participation of the local community and proper use of the local and tradition knowledge and skills is a crucial step for sustainable results. In this regard, the role of the local community, the local knowledge and traditional skills in the restoration and preservation works on the WCH sites of Lalibela was underutilized. As a result, the community is feeling neglected, the traditional conservation knowledge is diminishing and the traditional skills regarding the preservation of the churches are on the verge of extinction. So therefore, it is suggested that, an inward looking approach that keeps the local community role at the center of the conservation process from planning to implementation to be considered by the responsible institutions i.e. ARCH, the Ethiopian Orthodox Church and the Regional Culture and Tourism Bureau.

The international institutions such as UNESCO, ICOMOS and World Heritage Center and other international stakeholders along with their commitment of safeguarding the physical structures of the churches, they should also focus on the facilitation of the building of the local capacity for conservation of world cultural heritages. Providing a working system that acknowledges the complexity and advantage of engaging the local communities is timely: if the conservations of heritages to be sustainable.

The local community on the other hand should take initiatives proactively in preservation of the heritages regardless of their status as national or world heritage. The World Cultural properties mainly, living heritages like the Rock-hewn Churches of Lalibela are in most cases very close and more relevant to the local communities while they remain being the priorities of the national and international community and humanity in general. Thus, the role of the local community, the traditional know-how and skill will remain very relevant. Protecting it sustainably, in return it will have a positive impact on and contributed to the preservation of heritages.

Notes

\(^1\) The word conservation in this paper is used in its form on its legal definition in Ethiopia’s cultural heritage law: “Conservation” means a general protection and preservation activity carried out on a cultural heritage without changing its antique content” (Proclamation No.209/2000).

\(^2\) The visits were, in 2001 for pilgrimage, in 2010, on an academic excursion as a student of School of Heritage Conservation, Mekelle University’s, Ethiopia, and since 2011, frequent visits to the site as a researcher, and specifically in 2013 and 2016 to research the topic of this study.

\(^3\) A restoration by foreigners [Arabs] in 1919-20, was barely documented.

\(^4\) Director of Archaeological Museum of Bergamo, Italy. Member of the Committee for Restoration and Preservation of Lalibela Churches in the time.

\(^5\) The actual works on site was started February 2007
To analyze the role of local community, it is necessary to define what the local community is in the sense of this study. Hence, local community in this study’s sense is referring to the clergy, the tourist guides and residents of Lalibela who have strong bond to the day to day activities of the church.

In spring 2013, ARCHCh’s Employee, Mr. Eyob Waqtora was interviewed by the author. He stated that, in the mid 20th c. corrugated iron was new to many parts of Ethiopia, and were considered as mark of prestige. Thus, roofs of many old and important churches were replaced with iron sheets.

Woreda is Amharic word for of district. It is third-level administrative division in Ethiopia: after Federal and Regional Governments.

The Churches of Lalibela are owned and Administered by Ethiopian Orthodox Tewahdo Church (ARChCh 209/2000, 2000.)

Ferjeni is a word used to refer to the white man by the local community in Lalibela and its use is common all over Ethiopia.

In the 1970s, the Imperial Ethiopia was at the climax of political and economic crises. The Monarchy was facing tough resistances from different social and religious groups. In 1974, the Imperial government was overthrown by the military and the country fall under the socialist military rule. Ever since, the country was in crises until the end of the regime change in 1991. The cultural heritage conservation movement worldwide was showing advancement in the 1970s: whereas, the focus of the government in Ethiopia was on the pressing current political and military crisis. Hence, in Ethiopia, the Center for Research and Conservation of Cultural Heritage was organized in 1976 under the Ministry of Culture and Sport Affairs. Due to the aforementioned problems and the lack of financial and trained manpower the country faced no progress was recorded regarding active engagement in conservation of cultural heritage. Whereas, in 1978, UNESCO registered the Rock-hewn churches of Lalibela and the Simien National Park as the first world heritage sites from the sub-Saharan Africa and as part of the first 12 world heritage sites registered by UNESCO worldwide.

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和文要約
本研究は、世界遺産であるエチオピア・ラリベラの岩窟教会群（以下、教会群）における建築保存の伝統に関する研究である。分析の主対象は、1950年代以降の国内および国際機関による建築保存活動への介入に対する地域コミュニティの反応である。建築遺産保存活動について、地域コミュニティの関与と認識に関する調査を行うことによって、どのように伝統的な保存のノウハウと技術、文化的・宗教的資産、空間の本質が相互に関連し統合されているか、調査の中では注目した点である。エチオピアでの現地調査、主な関係者へのインタビュー、文献調査が主な研究方法である。

1950年代半ば以来、教会群には5回の主要な修復と保存活動が行われた。これらの目的は、漏水による損傷を防ぐことであった。4度の修復と保存活動のうちの3回では、UNESCOが資金援助、事業目的とガイドラインの設定において直接的に関与した。直近の1989年と2007-08年の2回の修復と保存活動は、本教会群が1978年に世界文化遺産に登録された後である。

一般的に、地域コミュニティは教会が自然災害および人間の懸念から直接的に保護されることを考えている。特に、1990-60年代の無責任な修復がもたらした損傷は、地域コミュニティを失望させた。地域コミュニティは修復計画の過程で監視され、担当者ができた役割は専門技術を必要としない単純労働に限られた。地域外からの物理的介入の結果は惨憺たるもので、教会建築をつくる材料の完全性と美の価値は損なわれた。複合的な教会建築群と、それがもたらした地域全体のランダムスケープとの間に関係が担保されていた地域の価値は侵害された。これは主に、プロジェクトに従事した外国人が、地域や宗教的伝統の本質を理解していなかったことや無視してきたことが原因である。1966年から67年のUNESCO主導による介入の開始に伴い、教会建築をつくる材料の完全性と美観上の価値を維持する試みに対する関心が高まった。

一方で、地域コミュニティを修復と保存活動の計画と実行プロセスから除外、あるいは完全に関与を除外しないとしても、専門技術を必要としない単純労働に限定する状態は続いた。場所の本質に対する侵害は悪化していた。これらの修復と保存活動は、地域外者による介入のあり方という観点においても、現在でもまた大きな問題である。漏水の問題解決という点においても効果的ではなかった。

遺産保護のため地域コミュニティが関与することの重要性、および伝統保存のノウハウと技術開発の重要性、これら5回のプロジェクトを通じて完全に無視あるいは損なわれていた伝統的な保存のノウハウとメカニズムに対する理解は乏しいまま、個人や年長者の記憶にまつわっているのが現状である。それらの記憶すらも、ドキュメンタ化が不十分なことに、保存プロジェクトを担う国内外関連機関の関心の低さによって、失われる瀬戸際にある。

以上から、計画から実施までのプロセスを通じて、地域コミュニティがコアになることによって、対象の内にある本質を洞察できるような保存活動における事業の在り方、国家機関、すなわち文化遺産の研究と保護のための機関（ARCCH）が検討する必要があると考える。UNESCO、ICOMOS、世界文化遺産センターなどの国際機関、教会保存の役割を担うあらゆる国際機関は、世界文化遺産保護のために、地域コミュニティが手することのできる役割に対して焦点を当てるべきである。遺産保存がサステナブルであるべきである観点にたとえば、地域コミュニティが携わることの複合性と利点を認識する、新たな仕事のシステムをつくりあげることは時宜を得たものである。一方で、地域コミュニティは、文化財のステイティスにかかわらず積極的に保存活動を主導すべきである。エチオピア・ラリベラにおける岩窟教会群のようなリビング・ヘリテージを中心とする世界遺産は、固有の地域コミュニティと非常に密接に関連しているだけでもなく、国内と国際社会と人類の財産である唯一続けるものである。

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