

Issues of Cultural Conservation and Tourism Development in the Process of World Heritage Preservation

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1. Introduction

1.1 Purpose and Research Method

In this paper the complex relationship between cultural conservation and cultural heritage preservation will be discussed based on the restoration of Djenné's Great Mosque. The preservation survey will be based on the great mosque restoration process and site observation. Throughout most of the preservation process, some of the traditional techniques and know-how are revalorized, and rehabilitated while others are denied and lost. On the other hand, preservation experts usually lead the projects in places where local carpenters are much more experienced. In the aim of understanding the social issues restoration projects raise, interviews were conducted with local masons and site experts with the purpose of understanding the social issues restoration projects raise. The relationship and the meaning of cultural preservation with tourism development will be analyzed. The field surveys were conducted between February-March 2010 and February - March 2011. Some of the information will be based on the surveys conducted in Djenné, about its town and architecture between 2004 and 2010

1.2 Mali: History and Geography

Mali is a landlocked country situated in the heart of West Africa. Mali was a French colony for about hundred years and use to be called the French Sudan. It became independent in September 22nd, 1960. Mali is bordered on the north by Algeria, on the east by Niger, and Burkina Faso, on the south by Côte d' Ivoire and Guinea, and on the west by Senegal, and Mauritania. It is a relatively large country with a surface area of 1,240,192 km², and the Sahara



Fig. 1 The Republic of Mali

desert covers 65% of its territory^{Ref1}.

The Niger River and the Senegal River run respectively for 1700 km and 800 km through the south and east of the country, while the northern region forms part of the Sahara Desert. The seasons are divided broadly into dry and wet or rainy. The dry season starts from around November to May, and the rainy season starts from around June to October. Rainfall, extremely low in the desert areas to the north, exceeds 700 mm annually in the south due to the tropical climate. The population is concentrated in central and southern areas, where the climate is relatively mild^{Ref2}.

Mali has 4 World Cultural Heritages sites, three (Djenné (since 1988), Timbuktu (since 1988) and Tomb of Askia (since 2004)) as cultural heritages and one (Cliff of Bandiagara (Land of the Dogons) (since 1989)) as mixed cultural heritage^{Ref3}.

1.3 Introduction of Djenné

Inhabited since 250 B.C., Djenné is a historically and commercially important small city located on the internal delta of the Niger in Mali, at the crossroads of the major trade routes of West Africa. Djenné became a market center and an important link in the trans-Saharan gold trade. From the 13th century, Djenné developed as the distribution point for everyday commodities such as rice and corn, and also as a center of arts, learning and religion. In the middle of the old city stands a great Sudanese-style^{Ref4} mosque, built in 1220 and rebuilt in 1907^{Ref5}. Djenné covers some 50 hectares on the



Pict. 1 Bird View of Djenne (By Helicopter)
Source: Oussouby SACKO (2004.3)

banks of the river Bani. Djenné has an ethnically diverse population of about 12,000 (in 1987) and 20,000 (in 2007). It became famous for its mud brick (adobe) architecture. The inhabitants of Djenné mostly speak a Songhay variety termed Djenné Chiini, but the languages spoken also reflect the diversity of the area. In the villages surrounding the city, Bozo, Fulfulde, or Bambara are also spoken.

(1) The Town organization

Djenné, offers a spectacular scenery from the Bani river because of the distance between houses and the uniqueness of its buildings resulted from the plastic quality given by mud. Indeed, the major construction material of the whole region is banco, the local name for the mud used in blocks, mortar and plaster.

The city itself is organized around ethnic/professional quarters along a major axial system, at the centre of which the mosque and the market square form an imposing urban space. Different ethnic groups coexist in the region and have different occupations and specializations. Hence, the Bozos are fishermen, the Peul (Fulani) raise cattle, the Bambara (Bamanan) are farmers, and the Sarakole (Maraka) are merchants. It is mostly the Bozo, the fishermen, who



Pict. 2 The town of Djenne
Source: Oussouby SACKO (2009.8)

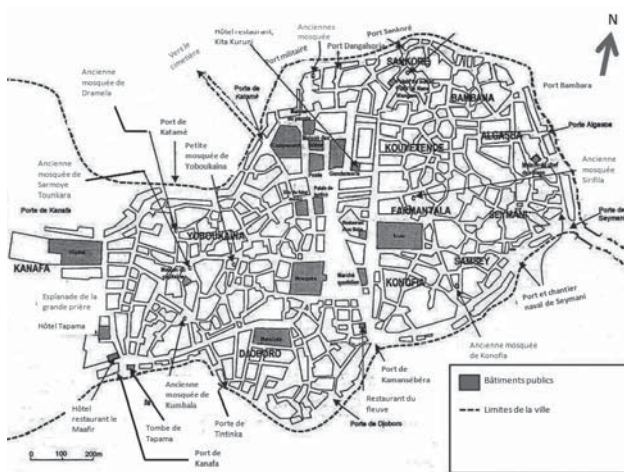


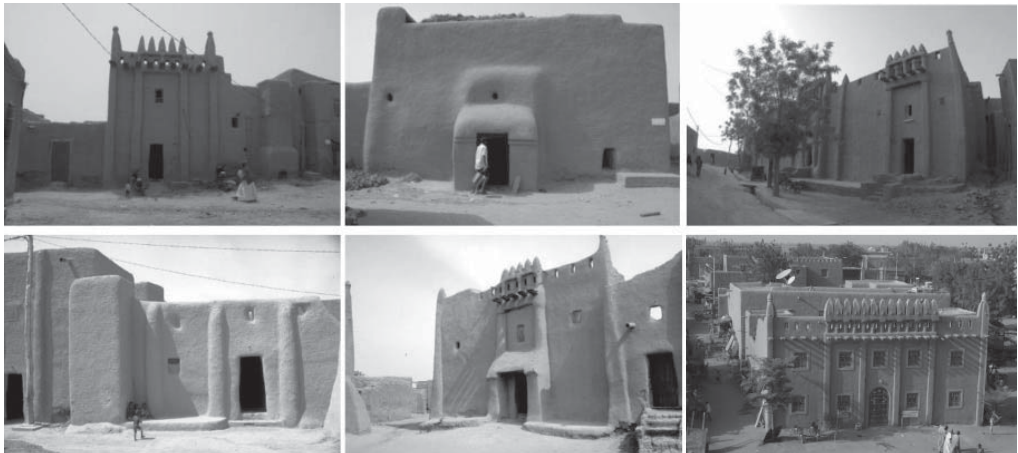
Fig. 2 The town of Djenne with public buildings, ports and gates
Source: Plan de Conservation et de Gestion des « Villes anciennes de Djenné » -Pp. 109 Mali2008-2012 (DNPC 2008)

also provide the masons. This ethnic diversity is very clear on market days, when each guild has its own place^{Ref.6}

(2) Houses typologies

Three major typologies can be identified in the city houses: 'Moroccan', 'Tukulor' and 'Plain'^{Ref.7}. These typologies relate to a certain extent to different historical periods and socio-economic levels,

but they refer specifically to the way the main facade of a building is treated and how this corresponds to the spatial organization of the house. Most houses are two-storey, with roof terraces. In all three



Pict. 3 The Different types of Houses in Djenne (Source: Oussouby SACKO (2010.02))

house typologies, the spatial organization reflects a strict separation of the sexes and the relative social positions of the inhabitants.

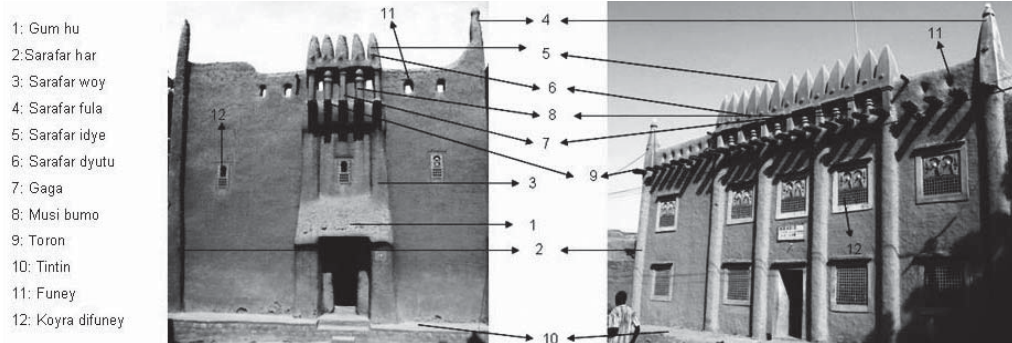


Fig. 6 House Plan of Djenne

Source: Plan de Conservation et de Gestion des « Villes anciennes de Djenné » -Pp. 48 Mali2008-2012 (DNPC 2008)

(3) Construction Materials

There are two types of mud blocks. The older type, now no longer used except for specific restoration work, is called Djenné ferey (bricks of blocks of Djenné) and consists of roughly cylindrical pieces. From the 1930s, it became common to shape the mud in rectangular block forms (toubabou ferey which means foreign blocks). During the dry season builders transform the river banks into pits for the preparation of banco, the mud that forms construction blocks and rendering mortar. The mortar for rendering is made by mixing mud with rice husks and the mixture is then covered with water and stirred occasionally, the same quantity again of rice husks being added gradually. The mixture then rests for two to three weeks to be fermented. Wood is used for the construction of floors, ceiling and roofs. It is also used for toron^{Ref.8}, natural architectonic elements and details so specific to the region.



Pict. 4 Djenne Ferey
Source: Oussouby SACKO (2010.2)



Pict. 5 Toubabou Ferey (2004.5)

Fig. 5 House Plan of Djenne (on the left)
Source: Oussouby SACKO (Seika University KIYO 39)



(4) The Mason organization (Barey-ton)

In this region the construction process itself is a kind of family and community affair shaped by the special ties that bind the masons and the families that own the houses. A family has 'their mason', as much as the mason has 'his family'. The relationship goes from father to son on both sides (the son of the house-owner's mason is the mason of the house-owner's son) and lasts for the whole of their life: the mason of the house also builds the house-owner's grave. For a mason to work for a different client requires the agreement of both the family and his fellow masons.

Masons (barey) are organized by a professional body, the barey-ton, which guarantees their professional training and establishes codes of conduct and support with other professions. Apprenticeship begins at the age of seven. The apprentice goes through a clearly codified structure of training during the course of which he becomes familiar with tools and materials, building techniques, building conception and the supervision of construction, until finally, in his mid-twenties; he is officially accepted as a barey. Magic plays an important role both as a means of protection against professional risks and as part of the code of relations between all the participants in the creation of a house. It is quite interesting to note that most masons in the region start by first 'drawing' the facade. The type of facade is the first issue for the mason and the client to agree on, since it seems to determine the whole spatial organization of the house^{Ref.9}.

(5) History of the Great Mosque of Djenné

The mosque was constructed around 1280 in the time of the Mali Empire (the 13 ~ 16th centuries) by the 26th King of Djenné, Koy Konboro who had just converted to Islam. It is said that he tore down his old palace and built the mosque at that site. That earthen building seemed to have functioned for a long time until its demolition in the 19th century. In 1893 when the French army occupied Djenné, the mosque had already been ruined. The present mosque was reconstructed in 1907 with French assistance on the same site. Since they must have utilized the existing platform and basal part of the ruined mosque, its original plan is considered to have succeeded almost intact, while the reconstructed form of the upper part probably reflected the aesthetic sense of that age. The foreman of the construction was the chief of the mason guild, Ismaila Traoré^{Ref.10}.

The mosque stands on a more than two-meter high platform in order to avoid damage from the occasional flooding of the surrounding river. This platform covering about 75m x 75m does not take a shape of a square but is distorted like a parallelogram. In response to that the plan of the mosque is also distorted and the shape of the courtyard is a parallelogram. As there should not have been a

difficulty of narrowness of the site such as in Cairo's mosques since it faced an extensive square, this distortion seems to derive from immaturity of measurement skills. It is easy to draw parallel lines, while it might be difficult to make right angles on a large scale. Djenné's oblong worship room of 50m x 26m approximately in area is the exact opposite of Turkish type mosque, a worship room of which looks like a cosmic space covered by an enormous dome. Djenné's mosque is just an extreme example of Arabic type hypostyle mosque (in contrast?), making as many as ninety thick pillars of earth stand densely, making it impossible to get a penetrating view of the interior space ^{Ref11}.

Constructing many columns together is a consequence for the erection of a grand hall with a flat

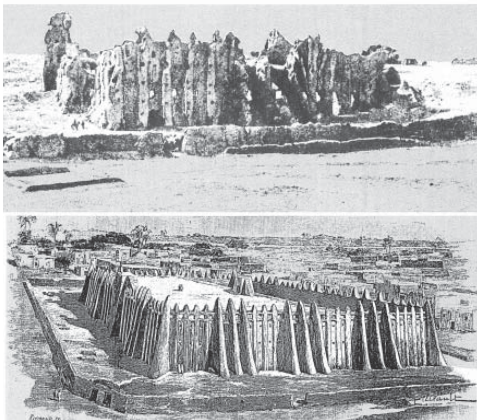


Fig. 7 Ruins of the old mosque in Djenné (on the left)
Source: Raoul Sneider, The Great Mosque at Djenné-Its
impact today as a model- Pp. 68-69



Fig. 8 Model of Djenné Mosque at the Musée National du Mali
Source: Takeo Kamiya homepage

roof without using a dome structure.

2. About World Cultural Heritage

2.1 World Heritage's Definition

The definition of the United Nations Educational, Scientific and Cultural Organization (UNESCO) World Heritage Site, is any place (forest, mountain, lake, desert, monument, building, or city) that is designated as having "outstanding universal value" which needs to be protected and preserve as World Cultural and Natural Heritage. The list is maintained by the international World Heritage Programme administered by the UNESCO World Heritage Committee, composed of 21 states parties which are elected by their General Assembly ^{Ref12}.

The program catalogues, names, and conserves sites of outstanding cultural or natural importance to the common heritage of humanity. Under certain conditions, listed sites can obtain funds from the

Table 1. Repartition of UNESCO World Heritage's Sites in the World

Zone	Natural	Cultural	Mixed	Total
Africa	35	43	4	82
Arab States	4	63	1	68
Asia-Pacific	52	142	9	203
Latin America & the Caribbean	32	62	3	97
less duplicates*	13	17	0	30
North America & Europe	73	432	11	516
Sub-Total	196	742	28	966
Total	183	725	28	936

Source: Wikipedia free dictionary http://en.wikipedia.org/wiki/World_Heritage_Site (2012.04.17)

World Heritage Fund. The program was founded with the Convention Concerning the Protection of World Cultural and Natural Heritage, which was adopted by the General Conference of UNESCO on November 16, 1972^{Ref.13}. Since then, 186 states parties have ratified the convention. The Convention sets out the duties of States Parties in identifying potential sites and their role in protecting and preserving those World Cultural and Natural Heritage. By signing the Convention, each country pledges to conserve not only the World Heritage sites located within its own territory, but also to protect its national heritage. As of 2011, 936 sites are listed (see table1): 725 cultural, 183 natural, and 28 mixed properties, in 153 States Parties. While each World Heritage Site remains part of the legal territory of the state where in the site is located, UNESCO considers it in the interest of the international community to preserve each site. What makes the concept of World Heritage exceptional is its universal application. World Heritage sites belong to all the peoples of the world, irrespective of the territory on which they are located^{Ref.14}.

The UNESCO seeks to encourage the identification, protection and preservation of cultural and natural heritage around the world considered to be of outstanding value to humanity.

The UNESCO World Heritage Mission^{Ref.15} is to:

- *Encourage countries to sign the 1972 Convention and to ensure the protection of their natural and cultural heritage;*
- *Encourage States Parties to the Convention to nominate sites within their national territory for inclusion on the World Heritage List;*
- *Encourage States Parties to set up reporting systems on the state of the conservation of World Heritage sites;*
- *Help States Parties safeguard World Heritage sites by providing technical assistance and professional training;*

- *Provide emergency assistance for World Heritage sites by providing technical assistance and professional training;*
- *Support States Parties' public awareness-building activities for World Heritage conservation;*
- *Encourage participation of the local population in the preservation of their cultural and natural heritage;*
- *Encourage international cooperation in the conservation of cultural and natural heritage.*

2.2 Definition and Preservation of Cultural Heritage

2.2.1 Definition of Cultural Heritage

"Cultural Heritage" designates a monument, group of buildings or site of historical, aesthetic, archaeological, scientific, ethnological or anthropological value ^{Ref16}.

Types of Cultural Heritage:

- (1) Monuments: architectural works, works of monumental sculpture and painting, elements or structures of an archaeological nature, inscriptions, cave dwellings and combinations of features, which are of outstanding universal value from the point of view of history, art or science;
- (2) Groups of buildings: groups of separate or connected buildings which, because of their architecture, their homogeneity or their place in the landscape, are of outstanding universal value from the point of view of history, art or science;
- (3) Sites: works of man or the combined works of nature and man, and areas including archaeological sites which are of outstanding universal value from the historical, aesthetic, ethnological or anthropological point of view.

2.2.2 Preservation of Cultural Heritage

(1) Defining Culture and Development

At the World Conference on Cultural Policies in Mexico City (1982), participants defined culture as "the whole complex of distinctive spiritual, material, intellectual and emotional features that characterize a society or social group. It includes not only arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs." (UNESCO, 1982) This broad definition of culture extends beyond art and heritage, and recognizes the intricate tapestry of culture that defines societies ^{Ref17}.

Development is both a threat and an opportunity to the cultures of the world, and economic globalization is at the core of the debate of how to preserve the cultural identity of diverse populations

while working to provide the benefits of globalization to all people. International trade often brings material goods into countries that displace traditional goods, yet it also provides opportunities to enhance the economies of diverse populations through the inherent value of traditional art and practices ^{Ref.18}.

(2) Cultural values in Conservation and Development

Values are the subject of much discussion in contemporary society. In this postmodern, post-ideology, post-nation-state age, the search for values and meaning has become a pressing concern. In the field of cultural heritage conservation, values are critical to deciding what to conserve ^{Ref.19} — what material goods will represent us and our past to future generations — as well as to determining how to conserve. Even brief consideration of a typical conservation decision reveals many different, sometimes divergent values at play: think of the artistic and aesthetic values of an old building, as well as the historical values of its associations, plus the economic values tied up in its use, and so on. In short, values are an important, determining factor in the current practices and future prospects of the conservation field.

Values and valuing processes are threaded through the various spheres of conservation and play an enormous role as we endeavor to integrate the field. Values give some things significance over others and thereby transform some objects and places into “heritage.” The ultimate aim of conservation is not to conserve material for its own sake but, rather, to maintain (and shape) the values embodied by the heritage—with physical intervention or treatment being one of many means toward that end. To achieve that end, such that the heritage is meaningful to those whom it is intended to benefit (i.e., future generations), it is necessary to examine why and how heritage is valued, and by whom. Cultural significance is the term that the conservation community has used to encapsulate the multiple values ascribed to objects, buildings, or landscapes.

The stories invested in objects, buildings, and landscapes, by individuals or groups, constitute a currency in which the valorizing of cultural heritage is transacted. The subtle distinction between valuing (appreciating existing value) and valorizing (giving added value) speaks to the interventionist and interpretative aspects of the simple act of identifying something as heritage. Simply labeling something as heritage is a value judgment that distinguishes that object or place from other objects and places for particular reasons, and as such, the labeling adds new meaning and value. The process of valorizing begins when individuals, institutions, or communities decide that some object or place is worth preserving, that it represents something worth remembering, something about themselves and

their past that should be transmitted to future generations. Heritage is valued in a variety of ways, driven by different motivations (economic, political, cultural, spiritual, aesthetic, and others), each of which has correspondingly varied ideals, ethics, and epistemologies. These different ways of valuing in turn lead to different approaches to preserving heritage.

For instance, conserving a historic house property according to historical-cultural values would lead one to maximize the capacity for the place to serve the educational function of telling the stories; the primary audiences in this case might be the local community, for whom association with this old place and its stories makes a significant contribution to their group identity. By contrast, conserving the same site to maximize economic value might lead to a conservation approach that favors revenue generation and tourist traffic over educational and other cultural values. Thus, parts of the property might be developed for parking, gift shops, and other visitor- support functions, instead of interpreting and conserving historic landscape or archaeological elements of the site; the overall conservation strategy might be driven by creating a popular (marketable) experience, as opposed to creating one that focuses on educational use by a target audience of school children ^{Ref.20}.

2.3 Definition of Conservation

Conservation (narrowly defined) has commonly been viewed as that which follows the act of heritage designation—that is, a technical response after a place or object has already been recognized as having value. The underlying belief has been that preservation treatment should not, and would not, change the meaning of the heritage object, yet the traditional practice of conserving — of preserving the physical fabric of a heritage object—does in fact actively interpret and valorize the object. Every conservation decision—how to clean an object, how to reinforce a structure, what materials to use, and soon — affects how that object or place will be perceived, understood and used, and thus transmitted to the future. Despite such postulated principles as minimum intervention, reversibility, and authenticity, a decision to undertake a certain conservation intervention gives priority to a certain meaning or set of values. Each decision affects how visitors experience the site and how they interpret and value the architectural forms and elements; these decisions likewise reflect how those responsible for care and protection interpret and value the forms and elements. In the realm of objects conservation, the issue of repatriation also captures such competing values.

Today our perception of cultural heritage is changing amid the rush of sights and images offered by an interactive world. Still anchored in history and ancestry, our perception must now be redefined in the new global cultural commons, in which the web of meanings traditionally offered by different

cultures is being rewoven. To understand what is happening, many people are looking toward the site where culture and history intersect—that is, toward cultural heritage. They are finding, however, that the cultural heritage is also in process and flowing with the tide. To think of cultural heritage was to think of art objects, archaeological sites, and historic monuments. Yet the meanings that assign worth to such concrete things and places come from the values that people attach to them. Among them a new global cultural commons is being created. It is multicultural by definition; it is patchy in its interactions; it is like the terra incognita of ancient maps.

More and more, the concept of cultural heritage is opening up—to cultural landscapes, popular cultures, oral traditions. The weave of meanings that crystallize into recognition in a given time and place is becoming more and more visible. An anthropologist today also knows that ethnographic description is but a transitory, fleeting glance at a reality by an observer bound by his or her culture and location in a certain time and a certain place. If we take the above view, then, the value given to cultural heritage will depend on the meanings that are chosen among those constantly traveling along a web of cultural exchanges and recombination's. At present, as never before, trade globalization, migrations, and tourism, as well as telecommunications and telematics, are rapidly adding more and more exchanges to that web. More contact and more exchanges may lead to greater creativity, but they also lead to the shielding of cultures through the politics of difference. So the question that should concern us is: How do we enhance the value of cultural heritage to safeguard it and to use it to build cultural understanding instead of cultural trenches.

2.4 Theory of Cultural and Architecture Conservation

2.4.1 Architecture and Cultural conservation

The definition of cultural conservation is complex as the definition of culture itself. But generally, people refer to conservation as the process of examine, research, maintain and preserve a cultural heritage. The process or work of conservation includes two dimensions, a preventive work and an interventive work, which is much more common in the case of cultural heritage. In the particular case of architectural conservation, it is describes as the process through which the material, historical, and design integrity of mankind's built heritage are prolonged through carefully planned interventions. Architectural conservation deals with issues of prolonging the life and integrity of architectural character and integrity, such as form and style, and/or its constituent materials, such as stone, brick, glass, metal, and wood. In this sense, the term refers to the "professional use of a combination of science, art, craft, and technology as a preservation tool "and is allied with - and often equated to - its

parent fields, of historic environment conservation and art conservation. In the cultural heritage conservation field, we are consistently faced with challenges on three fronts:

- ① Physical condition: Behavior of materials and structural systems, deterioration causes and mechanisms, possible interventions, long-term efficacy of treatments, etc.
- ② Management context: Availability and use of resources, including funds, trained personnel, and technology; political and legislative mandates and conditions; land use issues, etc.
- ③ Cultural significance and social values: Why an object or place is meaningful, to whom, for whom it is conserved, the impact of interventions on how it is understood or perceived, etc.

2.4.2 The aim of cultural conservation

The ultimate aim of conservation is not to conserve material for its own sake but, rather, to maintain (and shape) the values embodied by the heritage—with physical intervention or treatment being one of many means toward that end. To achieve that end, such that the heritage is meaningful to those whom it is intended to benefit (i.e., future generations), it is necessary to examine why and how heritage is valued, and by whom. The UNESCO has defined a convention about the protection and conservation of World Heritages^{Ref21} in which the article 1 can be applied to architecture conservation projects.

2.4 Remarks

Before discussing about conservation, the meaning or value of culture should be discussed, as it differ from one generation to another. From this perspective, we can understand that the cultural conservation needs a better understanding of the value of the society which is due to benefit the project. Every conservation decision affects how that object or place will be perceived, understood and used, and thus transmitted to the future. Decision affects how visitors experience the site and how they interpret and value the architectural forms and elements. The complex definition of cultural conservation makes the preservation work difficult.

The sites, arts and artifacts, language and intellectual property of many cultures throughout the world are in danger of destruction or exploitation. The destruction of sites with both cultural and historical significance is a primary concern during times of both conflict and peace. Artifacts from both ancient times and the contemporary world are sometimes highly valued by collectors and are sometimes traded legally or illegally. Ancient practices, knowledge and language are subverted for the benefit of those outside the culture of origin, undermining the rights of the members of that culture to

safeguard their heritage.

The need for protecting the cultural heritage of the world's diverse populations was recognized under the 1972 Convention on the Protection of the World Cultural and Natural Heritage. The Convention established the World Heritage List of over 936 sites in 153 countries (2010), including, protected towns, monuments and natural environments. Sites threatened by neglect are included in the List of World Heritage in Danger. The member states party to the Convention pledged to engage in international cooperation for the protection of these sites. UNESCO is also involved in protecting the intellectual property rights of cultural groups ^{Ref.22}.

3.1 State of conservation of architectural heritage in Djenné

In response to Decision 32 COM 7B.50 ^{Ref.23}, the State Party (the Republic of Mali) submitted a state of conservation report, on 22 March 2010 ^{Ref.24}. This report provides information of progress achieved in the fields of management and conservation, and makes particular mention of the following activities: The report noted that the property continued to suffer changes as regards its buildings. The report indicates that the reason for these changes is essentially due to the modification of the original plans of the houses because of new needs for comfort and the increase in the size of some family cells, the escalation in cost of the materials used for traditional livelihood (rice and millet, baobab fruit, shea butter), to the introduction of inappropriate solutions using cement and terra cotta, the abandonment of numerous buildings that have fallen into ruin, and the appearance of new constructions in the inscribed periphery. In the face of these changes, the Cultural Mission has questioned the contraveners and called upon the cooperation of the municipal and administrative authorities. But clearly, and according to the report, the involvement of these bodies is not yet fully secured for the task of protection assigned to the Cultural Mission of Djenné. The report also indicates efforts of collaboration with actors such as the corporation of masons « Barey Ton », the Djenne Heritage Association, the Association of Guides, the customary authorities and opinion leaders. Exemplary restoration has been carried out in 2009-2010. The Djenné Mosque has been restored in the framework of a program for the rehabilitation of Earthen Architecture, established between the Mali Ministry of Culture and the Aga Khan Foundation for Culture.

In the framework of the World Heritage Earthen Architecture Programme, a number of activities is also being implemented since January 2010 at Djenné including a rehabilitation project for the Youth House, financed by the Government of Italy, and the preparation of town planning and construction regulations adapted to earthen architecture. This project will enable the production of a technical guide

for the rehabilitation of earthen architecture to assist in the control of interventions at the property and in its buffer zone.

The World Heritage Centre and the Advisory Bodies note the absence of clear working tools (town planning and construction regulations) to control the growth of new constructions and poor rehabilitation in the property, despite the positive initiatives of the State Party. As already mentioned in previous reports, if these tools are not made available very rapidly, these changes will most certainly compromise the coherence of the urban fabric of Djenné. While applauding the support and intervention of the Aga Khan Trust for Culture in the restoration of the Mosque, the World Heritage Centre and the Advisory Bodies, would nevertheless welcome assurance that major restoration projects will be based on adequate documentation, a clear shared understanding of conservation approaches, and respect for traditional conservation practices. They also consider that all major projects should be tied into the management plan and respect its priorities.

In 2002, 2005, a commission of monitoring Djenné submit a report (World Heritage Centre missions; 2006: World Heritage Centre/ICOMOS/ICCROM Reactive Monitoring mission) in which the following factors affecting the property were pointed:

a) No management and conservation plan; b) Pressure from urban development; c) Deterioration of dwellings; d) Waste disposal problems; e) Encroachment of the archaeological sites.

The 2008-2009 management and conservation plan prepared by the National Direction for Cultural Heritage was completed and submitted to the World Heritage Centre in October 2008. This management plan aims at encouraging the establishment of an integrated conservation and management system involving of Djenné and the archaeological sites, promotion of expertise and local know-how of the populations in the field of conservation of earthen architecture, improvement of tourism and continued efforts for the revitalization of the ensemble of the ancient fabric.

During the UNESCO meeting in Brasilia (Brazil 25th July - 3rd August 2010), The World Heritage Committee reiterates its concerns about the absence of town planning tools and construction regulations in Djenné. It recalls the international donor community to support actions to address or resolve the sanitation problems in the ancient fabric. It also requests the State Party to submit to the World Heritage Centre the prepared town planning and construction regulation as well as clarifications on the boundaries of the property and its buffer zone following the topographical survey of January 2008, by latest 1 December 2010; Further requests the State Party to submit, by 1 February 2012, a report on the state of conservation of the property and on progress achieved in resolving the sanitation problems as well as the problems experienced at the archaeological sites, for examination by the World

Heritage Committee at its 36th session in 2012.

Table 2 Chronology of preservation projects in Djenne

National Projects		
Dates	Description	Partnership
1996	Workshop and Training of West African's Cultural Sites Managements	Financed by UNESCO
1995	Survey about Tourism Impact on Cultural Sites by Cultural Mission Agencies of Djenné and Bandiagara	Financed by UNESCO
1993 June 11 th	Creation of Djenné Cultural Mission Agency by Ministerial Decision (93-203 P-RM of 1993 June 11 th , review by Ord. No. 01-032/P-RM of 2001 August 3 rd).	Malian Government Body
1988	Subscription of Djenné on the UNESCO World Cultural Heritage list	Malian Government World Heritage Committee
Architectural Projects		
2008-2012	Great Mosque renovation and Training	Aga Khan Trust for Culture
1996-2006	Djenné's Architecture Restoration Project. Restoration of 130 Houses, Construction of New Public Projects and Valorization of Djenné's Masons Know-How	Netherlands

Source: Based on the [Plan de Conservation et de Gestion des « Villes anciennes de Djenné » - Mali]2008-2012, Dnpc 2008

3.2 Djenné conservation projects

3.2.1 Houses renovation and Restoration Projects by the Netherlands Found

In 1995 and in 1996, joint missions were constituted. The mission, acknowledging the special quality of the built space of Djenné, also recognized that if the city had not suffered serious aggression from "modernity", it was in part due to its isolation and to the stagnation of economic activity, which were at the same time causes of the collapse of an alarming number of older structures. It was thus envisaged to undertake a short-term project with the goal of "conserving this unique monument for the present and future generations", which focused on the rehabilitation of 168 of the monumental houses considered to be the most representative of the "national cultural identity". The intervention ranges from minor repairs and wall rendering to total reconstruction, based on existing documents or relying on the descriptions of those who remember.

- ① The conservation and safeguarding of the city of Djenné as a living cultural patrimony. Tied to this was the need to give the inhabitants a decent life in a threatened environment.
- ② The conservation and promotion of a specific 'know-how' on earth architecture.

Further objectives included:

- ① Raising the local population' s awareness of the value of their cultural heritage
- ② Increasing the sense of responsibility towards the vulnerable site
- ③ Promoting Djenné as a center of cultural tourism
- ④ Raising the prestige of 'earth architecture'
- ⑤ Training young people in local construction techniques
- ⑥ Improving local government structures, enabling them to undertake restoration and conservation operations on their own
- ⑦ Boosting economic development by creating job opportunities in the fields of construction, restoration and cultural tourism

3.2.2 Mosque Restoration Projects by the Aga Khan Trust for Culture

Beginning in 2004, under a public-private partnership, the Aga Khan Trust for Culture (AKTC) began working to revitalize the centers of three cities in Mali. AKTC started with the restoration of the Great Mosques of Djenné and Mopti and the Djingereyber Mosque in Timbuktu, as well as the public spaces around them. The mosque restorations became the most visible part of a multidisciplinary programme aimed at improving the quality of life in the cities. These efforts included the installation of new water and sanitation systems, street paving, early childhood education, training, health care and economic development. The Trust' s work relies on close co-operation with local institutions and stakeholders and the participation of experienced local masons and specialists in restoration ^{Ref.25}.

3.2.3 The Chronology and Process of Mosque Restoration

On the 26th of October 2008, a technical field work was initiated by Aga Khan Trust for Cultural on the request of Mission Culturelle de Djenné and the DNPC in the technical documents (Diagnostic pathologique de la Mosque de Djenné) addressed to AKTC. Before that the local traditional, religious and administrative authorities demonstrated their desire for the project and consented to it. In addition to the technical and architectural surveys there were some publicity campaign for civil society to understand the project and to accept the AKTC as the main sponsor and executor on site.

Chronology of Mosque Restoration ^{Ref.26}

(1) Architectural Measurements and Diagnostics

For programming restoration and understanding the building and construction material problems

(2) Site Installation and Preliminary Works

- ① Bats urgent exclusion
- ② Management and storage of material stock and construction of temporary storage space
- ③ Rehabilitation of surrounding zones

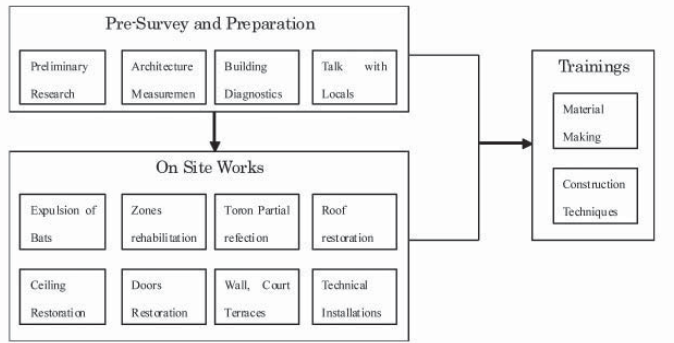
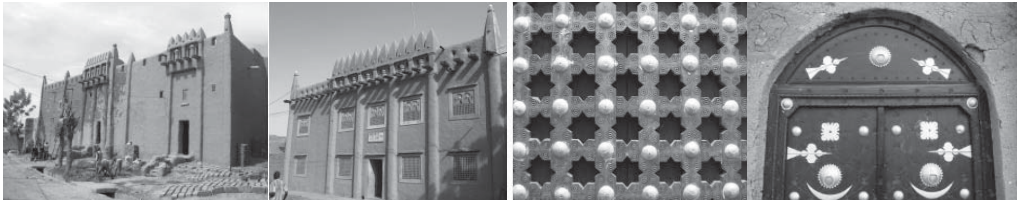


Fig. 9 Restoration Project Process and Stages



Pict. 6 Restoration Projects (Houses' Façade, Windows and Doors)

Plan de Conservation et de Gestion des « Villes anciennes de Djenné » - Mali|2008-2012, Dnpc 2008

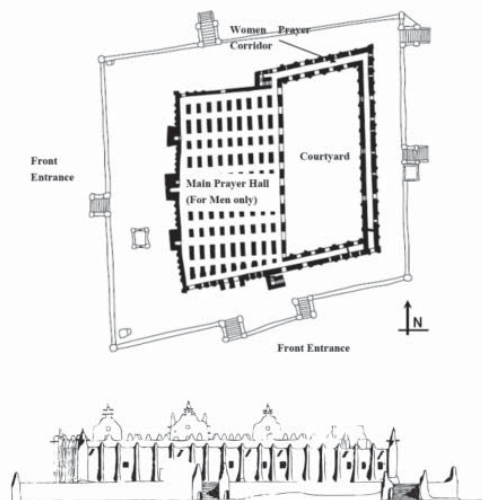


Fig. 10 Mosque Plan and Front Elevation (East)
Source: Oussouby SACKO (Seika University KIYO 39)



Pict. 7, 8 Mosque Restoration (Roof)
Source: Oussouby SACKO (2010.2)

(3) Drainage and Cleaning of the surroundings and improvement of Sanitation

The report of the Cultural Mission pointed out the following problems

- ① The closeness of the ablution space with the mosque's main wall which can cause structural damage
- ② Difficulties in maintaining the ablution zones due to the lack of enclosure allowing for dust and plastic bags/garbage to enter the space
- ③ Lack of ablution space during the festivities and Great Prayers events
- ④ Low and uncomfortable ablution seats



Pict. 9, 10, 11, 12 Roof top light renovation Source: Oussouby SACKO (2004.5, 2010.2)

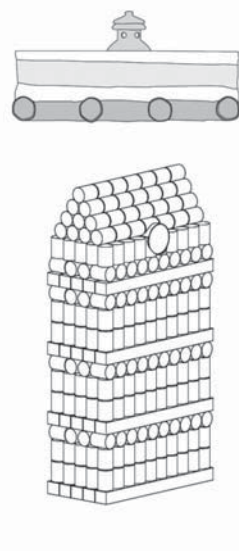
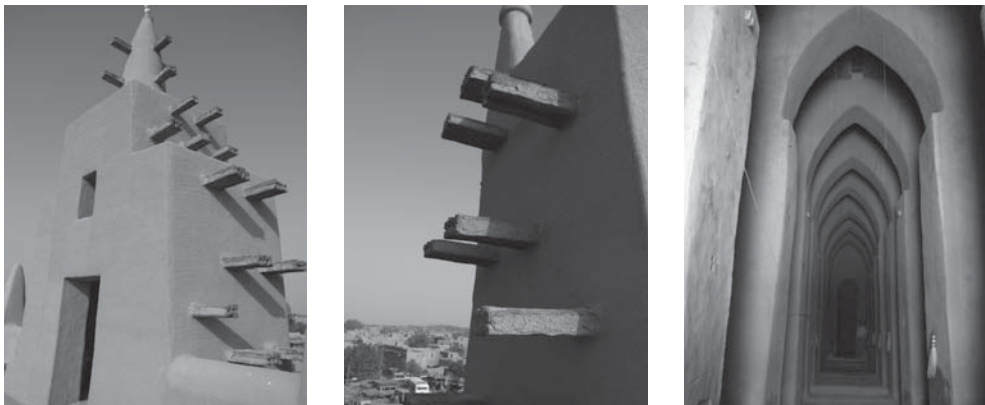


Fig. 11 Wall with Djenne Ferey



Pict. 13, 14, 15 Roof , Toron (Palm Tree Beams), Interior Columns Restoration Source: Oussouby SACKO (2010.2)

- ⑤ Bad evacuation of used and waste water for toilets
 - ⑥ Stagnation of used and waste water which affects the neighbors
 - ⑦ Public use of those spaces and toilets during the regular market days
- (4) Preliminary works
- ① Clean-up of ablution zones
 - ② Organization of different zones
 - ③ Plastering of ablution zones
- (5) Woodworks and bats elimination
- (1) Replacement and restoration of doors and windows
 - (2) Replacing damaged nets
 - (3) Progressive elimination of bats
- (6) Material Sources Identification
- ① Yellow banco (earth=mud) for blocks fabrication and mortar preparation locally called Coreyndi comes from a carrier situated 2km north of the town of Djenné on the way to the village called Senassa
 - ② For the Djenné Fereys fabrication, the banco comes from the village called Camantale
 - ③ The carrier of black earth (Yar Labou) used for plastering, comes from the site close to the archeological sites (Djenné-Djeno)
 - ④ The earth use for pottery and tile works called Djammay labou comes from the village Camantale on the river bank
 - ⑤ The grass and rice husks comes from almost all the villages around Djenné
- (7) Site Installation
- ① Construction of storage zones
 - ② Mud mix zone
 - ③ Wooden trays and bins zone
- (8) Scaffolding Installation
- ① On the north
 - ② On the south
- (9) Refection des Torons ^{Ref.27}
- ① Repair and replacement of all beams and Torons



(10) Roof restoration

3.3 Issues arising from Projects

Conservation projects' impact evaluating by the government body as follows:

- ① Projects saves Djenné's architecture
- ② Projects saves the national identity which are the architecture and construction style
- ③ Projects gives the population the sense of conservation
- ④ The continuation of restoration and conservation projects will contribute to Djenné's socio-economic and tourism development

But on the other hand, the restoration projects raised some issues, such as the gap between traditional and modern techniques or approaches during the construction as follow:

- ① Influences on the Annual Coating (recovert) Festival
- ② Confusion between building workers (masons)
- ③ Confusion in the meaning of conservation for Djenné's people
- ④ Disorder in conservation spirit of construction culture (The use of oral tradition)
- ⑤ Local techniques preservation problems while continuing restoration projects
- ⑥ Confusion in the role and responsibility of local population in those projects
- ⑦ Confusion in the role of local and national authorities in conservation process

The term may be described as embracing that which can be passed from one generation to the next and following generations. In the case of Djenne, as described above, the foreign agencies and experts lead

Pic16: Material Storage (Djenne Ferey) 2. Inspection of Wall condition 3.Elimination of Bats (Type Taphozous) 4.Rehabilitation of Surrounding Buildings or construction 5. Restoration of Doors and Windows (woodwork) 6. Rehabilitation and Cleaning of ablution space 7.Mortar preparation space 8. Scaffolding Installation (source Oussouby SACKO)



Fig17. Project team (From left Chef Manson, Architect (AKTC), Local Coordinator)

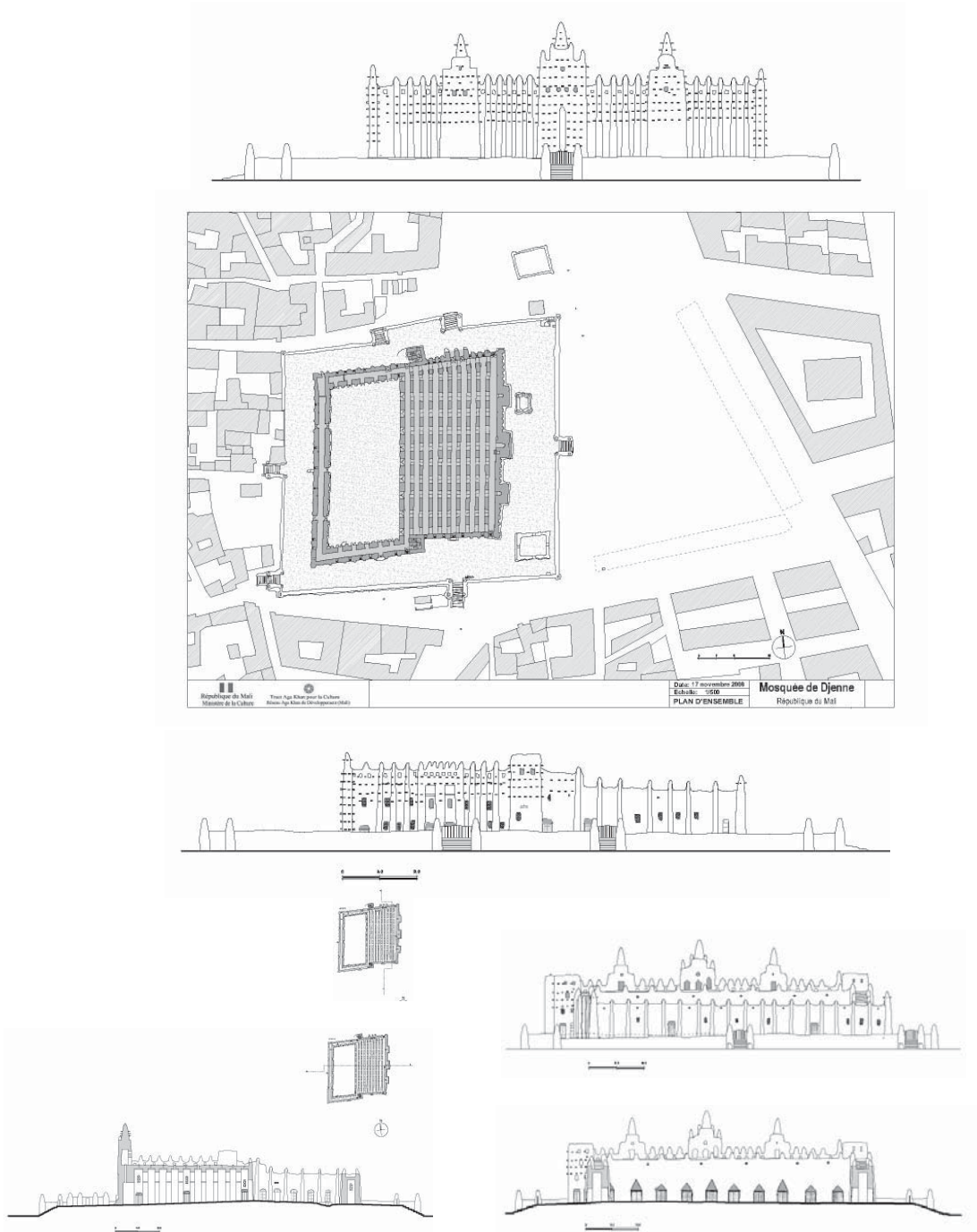


Fig. 12 The Plan Elevation and Sections of the Mosque

Source: Rapport d'activités Octobre - Décembre 2008, Programmes des Interventions Réalisées et Travaux Futurs, Projet de Restauration de la Grande Mosquée, ANNEXE : RELEVÉ ARCHITECTURAL, Djenne-Mali, Aga Khan Trust for Culture, 2009

preservation project and local population are much more like observers of what is supposed to be theirs. In some cases, new techniques were introduced for making mortars true that some old techniques were revalorized. With its long construction tradition, the preservation and restoration projects in Djenné seem to create a gap between cultural conservation and preservation. This discussion paper's aim is to be an opportunity to rethink about cultural conservation, which is lost in the preservation process.

4. Tourism in Djenné

4.1 Understanding the tourist data of Djenne

Djenné is one of the most visited tourist site in Mali. But, the principal hotel infrastructure in Djenne (Campement – Maafir – chez Baba –Résidence Tapama, Kita Kuru, Djenné - Djeno) shows the number of tourist decreasing between 2003 and 2007 due to the rebellion in the north of Mali and the series of foreign kidnapping by several groups of bandits in the same area, including the Aqmi^{Ref28}.

Djenné is protected as World Heritage, not only because of its unique architecture with the Mosque, but also because of the archaeological importance of the ancient towns of Djenné-Djeno lying on its outskirts. One other aspect is that tourists usually come to Djenné as part of a cultural circuit around Mali that also includes two other World Heritage sites: Dogon Country and Timbuktu, and they stay only one day or two maximum.

4.2 A Typical tourist visit in Djenné

For most tourists coming

Table 3. Group and People involved in Mosque Restoration Project

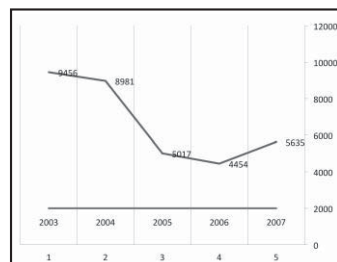
Groups	Name and Function	
Costumes and Religious Groups	Haseye MAIGA	Djenne Traditional Chief
	Almami KOROBARA	Imam of the Mosque
	Ba KOROBARA	Representative of Imam
	Alphamoi NANTAO	Muezzin
	Modi SIDIBE	Adjunct Muezzin
	Sekou TRAORE	Chief of Barey Ton
	Ahmadou MAIGA	President of Mosque Management Committee
National and Regional Authorities	Mamadou Abdoulaye DIARRA	Governor of Mopti
	Mamadou Balla DEMBELE	Prefect of Djenne
	Kantara DIAWARA	Vice Prefect
	Sama DEMBELE	Vice Prefect
	Gourou CISSE	Djenne Mayor
	Al Habib MAIGA	Vice Mayor
Ministry of Culture	SEM Mohamed El Moctar	Minister de la Culture
Direction du Patrimoine Culturel	Klessigue SANOGO	Director
(Division Sites, Monuments Historiques et Architecture Traditionnelle)	Mamadou CISSE	Head of Division
Mission Culturelle (Cultural Mission)	Yamoussa FANE	Director
	Amadou SAMAKE	Vice Director
Aga Khan Trust for Culture		
Aga Khan Development Network		

to Djenné, their contact with the town is brief and usually occurs on a Monday to coincide with the weekly market. Mondays in Djenné are however atypical as the usually quiet town is full of people, cars, trucks and animals from the surrounding towns and villages, cities as Mopti, Segou and even Bamako. The main place in front of the mosque becomes host to hundreds of temporary merchants and visitors who arrived on Sunday night and go back on Monday afternoon. As merchants often do, many tourists arrive in the town's few hotels on Sunday evening, usually leaving on Monday afternoon ^{Ref.29}. A typical tourist journey in Djenné is as follow: going to the market place on Monday morning, taking a few pictures of the Great Mosque from a nearby rooftop and then visiting the town with a guide in the afternoon, taking pictures of few traditional Djenné houses and a few landmarks such as the Tomb of the Sacrificed Virgin (Tapama Djennépo). Tourists who spend more than a day in Djenné may visit the archaeological sites or some of the outside villages either by horse or by car. These villages and their little mosques, like most villages in the region, are also built in mud brick architecture style and by masons from Djenné.

As is true for the rest of Mali, the tourist season is short (Starting from mid-October to mid-March) and the income generated during these few months must sustain those working in tourism business for the rest of the year. Tourists who arrive in large groups are labeled by the derogatory term 'chumpas' and the tourist season is referred to as 'la chasse aux chumpas' (the chumpas hunt). Unaccompanied tourists will usually be hounded until they reach an agreement with a guide and any

Table4. Tourism Statistics of Djenne between 2003-2007 (by Country)

Country of Residence	2003		2004		2005		2006		2007	
	Arrivals	Stay (Nights)	Arrivals	Stay (Nights)	Arrivals	Stay (Nights)	Arrivals	Stay (Nights)	Arrivals	Stay (Nights)
A International Visitors										
1 West Africa	118	125	118	153	125	143	96	117	70	86
2 Other African Countries	90	98	58	74	10	10	13	20	18	24
3 Germany	477	489	435	494	183	222	185	211	184	247
4 Austria	151	157	47	57	53	53	72	76	69	89
5 Benelux	1207	1208	892	1014	397	526	254	305	419	599
6 Canada	140	160	160	202	77	96	109	133	96	114
7 Iberique	317	317	326	344	210	227	224	286	164	217
8 East Europe	70	81	134	168	14	27	55	68	62	88
9 USA	479	482	464	484	248	307	115	115	146	173
10 France	3062	3097	2837	3020	1519	1662	1287	1453	1757	1918
11 Italy	660	695	523	567	144	157	450	479	721	770
12 UK	629	651	424	516	182	230	211	257	203	260
13 Japan	178	201	239	270	62	95	100	108	80	93
14 Middle East	7	7	30	30	61	84	7	11	11	12
15 Scandinavia	76	76	57	60	18	18	10	11	17	21
16 Swiszerland	120	125	160	188	35	37	72	81	77	107
17 Russia	10	10	17	19	0	0	17	21	9	11
18 Others	60	60	42	42	11	14	2	2	62	62
Total	7851	8039	6983	7702	3349	3914	3279	3754	4192	4920
B Malian Residents										
1 Nationals	1365	1369	1116	1171	928	1103	489	668	526	695
2 Foreign Residents	48	48	85	108	0	0	22	32	13	20
Total	1413	1417	1201	1279	928	1103	511	700	539	713
General Total	9264	9456	8184	1981	4277	5017	3790	4454	4731	5635



Number of tourism

2003	9456
2004	8981
2005	5017
2006	4454
2007	5635

attempt at going it alone in Djenné usually fails as unaccompanied tourists represent an irresistible untapped financial resource. Consequently, many tourists have mixed feelings about their time in Djenné as it is busier and more aggressive than they had hoped. These problems have led the Malian Government to set up a tourist office in the town (OMATHO) and implement new rules requiring the guides to pass a test in order to obtain a work permit. The tourist office is the newest player in an elite which includes the Cultural Mission (established after Djenné was declared a World Heritage Site), Djenné Patrimoine (a local heritage organization), the Imam, the Chef du Village, the Préfet, and the Quartiers elders who all compete to have a say in the future of Djenné' s heritage. This 'heritage elite' is conversant with the language of Western heritage officials and have access to the funds that they bring to the town.

4.3 Djenné as World Heritage and Cultural Tourism

« It is a mistake for the whole town to be classified (as World Heritage) because Djenné is a living town; it is not a monument that we can classify like an object in a museum ”³⁰

The question of who benefits from Djenné' s World Heritage classification is a complex one. UNESCO benefits by fulfilling its global mandate and answering criticism of euro-centricity by declaring a site that is at once monumental and African. The Malian State benefits by gaining prestige, attracting development and heritage dollars to its cause, and by attracting tourists. The way in which the town of Djenné benefits is however more nuanced as World Heritage status brings with it certain obligations. In the case of Djenné, UNESCO has decreed that the whole town should stay materially the same and rejects new technologies that would help home owners cope with the yearly cost of maintaining their homes. At the time of a visit by UNESCO officials to Djenné in 2005 the subject of de-classifying some of the town to allow for new housing development was brought up and dismissed out of hand by the UNESCO officials who insisted on keeping the architectural integrity of the whole of Djenné. However, UNESCO does not provide any direct financial assistance to help meet the homeowners' spiraling costs.

4.4 Obstacle of Tourism Development in Mali

Recently, most European countries have issued travel warnings to Mali as attacks were renewed by Al Qaida au Maghreb. Tourist numbers are in steady decline, especially in the North. The attacks

launched by the Tuareg in January 2012 are putting a further severe strain on the tourism sector in the North of Mali.

For Mali, one of the most important economic branches is tourism, into which the country has invested around 630 billion franc Cfa (1000 Franc Cfa = 1,50 euro) over the last few years. This includes developing the hotel and catering trade, also in rural regions, and improving infrastructure, such as roads and public transport throughout the country. The plans of Mali government and the neighboring countries of Mauritania, Burkina Faso and Niger to offer common visas are a further step towards expanding tourism.

The Al Qaida au Maghreb Islamique group, which is also thought to be operating in the North of Mali, represents a threat because numerous western countries, and above all France, have declared the Dogon Country, The North of Mali, a red alert zone with the result that tourist numbers have strongly declined.

Since 2008, the terrorist group Al Qaida au Maghreb Islamique(AQGMI), has contributed to a considerable destabilization of the Sahel countries Mali, Mauritania and Niger by committing numerous assassinations in the regions, the conflicts with the Touareg having just been settled. Mali' s northern provinces, and in particular the formerly so important Timbuktu, which can still boast so many legends, has been declared a red alert zone by European countries such as France, the United Kingdom and Germany. This dealt a severe blow to tourism. After an almost one-year break, AQGMI once again launched an attack in Timbuktu towards the end of November 2011, killing a German tourist and kidnapping three other tourists. After this assault, tourists are probably going to stay well clear of the region and the newly opened hotels and restaurants, which have also been created with government support over the last ten years, will be waiting for guests in vain. It remains to be seen whether it will still be possible to hold the "Féztival du Désert" in 2012. For years, this unique annual festival has attracted visitors from all over the world who had the opportunity to listen to famous Mali music group under a desert sky for two days and two nights. According to statistics, more than 45,000 guests came to Timbuktu in 2006; in 2009, there were only 4,000, and in the first six months of 2011, a mere 429 guests came³¹.

4.5 Consequences for the population

Mali placed great hopes in the tourism sector, since it had been counting on the creation of a large number of jobs in the tourism trade thanks to the country' s most important tourist sites, including not only Timbuktu, but also Djenné and the Dogon Country. These locations have been

declared World Heritage Sites by UNESCO. But the hotels and restaurants are only poorly frequented, and the numerous tour operators and guides wait in vain for guests. Thus it has to be feared that investing in tourism, an important element of Mali's policy to alleviate poverty, will come to nothing.

Just like everywhere else in the world, young people are especially hard-hit. Many of them have been trained as official tour guides or opened up small travel agencies. If they lose their jobs, a lot of them will probably head for the capital of Bamako, where they can be added to the army of job-seekers. Or they may well fall prey to drugs and arms dealers from the Ivory Coast and other neighboring countries, who are increasingly smuggling their goods through the country.

4.6 Remarks

For most developing countries, tourism has become an important business branch that in particular the local rural population can benefit from. For whether in Africa, Asia or Latin America, many of these countries have great natural and cultural assets that attract veritable droves of tourists from Europe or North America.

While Mali has no palm beaches by the sea, it can boast what are probably some of the most beautiful cultural monuments as well as the most unique clay architecture in West Africa. Over the past ten years, the country has been investing heavily in developing the tourism sector, together with numerous private enterprises that have established small tourism businesses throughout the country and opened hotels in the most attractive spots, such as Timbuktu, Mopti, Djenne and Biandagara, some of which are very comfortable. Owing to Al Qaida au Maghreb Islamique attacking tourists in Timbuktu towards the end of November 2011 and travel warnings for the entire North of Mali (which also includes the Dogon Country), these investments appear to have been futile.

Of course it is not only the tourism sector that has been hit by the AQMI activities but the stability of the entire region. Determined steps have to be taken to prevent any further destabilization, e.g. via political and economic support for development in the Northern provinces that are affected. Jobs have to be created that can, for instance, also replace the jobs lost in the tourism sector. Developing agriculture along the River Niger, as planned by the Mali government, would be an alternative. Mali's European partners, France, Germany and the United Kingdom, ought to contribute to this, for Mali will not be in a position to master this challenge on its own. Military action against terrorist organizations or organized drugs and arms smuggling will not be enough.

5. Conclusion and Discussion

The question of why Djenné is being preserved, for whom and for how long into the future needs to be addressed on a number of levels. If the town is being preserved exclusively for its residents, in order to ensure the protection of their 'identity' - a nebulous term which would make reference to knowledge transmission, cultural pride and continuity - then an adaptation of the local architecture may help residents to meet the demands of the upkeep of their homes and fulfill a desire for better housing conditions and modernity. On its website, UNESCO describe Djenné as an 'enchanted town of mud' but the reality of mud houses for many people is cramped living conditions, poor light and ventilation due to small windows and unsanitary living conditions due to the recent failure of the town's sanitation project.

A housing restoration project undertaken by the Dutch Government from 1996 to 2004 (broadly, the objectives were to safeguard the architectural heritage of Djenné whilst sensitizing local populations to its importance through the restoration of 100 houses) brought to light many of the underlying tensions between assumptions made on behalf of heritage officials and the reality of living in mud structures. For the people who were lucky enough to have their houses restored, the benefits were primarily functional. This functional benefit was not in line with the Dutch aims, which were to promote and protect cultural heritage. Further difficulties came from the fact that people saw the restoration project as an opportunity to improve their homes but this was disallowed by the Dutch project which abided by notions of authenticity drawn from early photographs and descriptions of the town. Furthermore, the use of fired clay tiles on houses to protect them from the rain, a practice condemned by UNESCO but seen as a potential solution by Djenné residents, is described in a functional, and not aesthetic way. In the case of Djenné, therefore, housing is at once a basic human need, and right - the right to shelter- but is also considered 'world heritage' and falls in to new thinking about cultural rights and identity. What is contradictory in this process is by imposing rules for cultural heritages protection and at the same time denying the basic human right - the right to shelter, and freedom from constant anxiety about it- should be given more weight than the protection of world heritage. Of course, the two things do not necessarily need to be contradictory, but it would take a large commitment on the part of UNESCO to ensure the upkeep of the town. As UNESCO explicitly state, they are not a development agency and it is not their business to provide direct aid to World Heritage Sites (unless they consider World Heritage in danger). Attempts to de-classify some of the town for development, whilst protecting others (along a European 'historic centre' model) have

been rejected by UNESCO, most recently in 2005 when the UNESCO delegation to Djenné stated that it was a world heritage site due to its architecture integrity. UNESCO feels that the whole of Djenné should stay the same. How does freezing the town's architecture allow for development and change? Are tourists who come to Djenné really looking for a town frozen in time? Preliminary evidence from the field points towards tourists having a far more sophisticated understanding of the situation than they are given credit for.

The struggle to maintain cultural identity in the face of development came to the forefront of international debate in the 1960s during decolonization. Models of development at the time stressed modernization through industrialization and urbanization. These models threatened the established cultures of diverse populations and as people began to find political freedom, they also began to challenge the homogenization, or "Westernization" of their cultures (UNESCO, 2003). In response, the international community began to incorporate the protection and preservation of culture into development models, recognizing the importance of cultural identity in the maintenance of society and finding ways to use culture to enhance the development process.

As I mentioned in the introduction, this research report is a preliminary work for a discussion between architecture conservation and world heritage preservation. This paper is not a classical research report, but at the same time a collection of facts, remarks, critics and realities surrounding both, world heritage preservation and tourism development. It includes preliminary research reports and critics in which the author consent and wanted to share with others about the actual situation Mali is facing. This paper will be an opportunity for a broad range of readers to share the contents of those critics and understanding what are happening around living world heritages, and what are the reality of people living around those facilities and the gap between government politics, UNESCO conservation policies.

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process, involvement of each party in the Mosque restoration, Mr. Yamoussa FANE, Director of the Cultural Mission in Djenne with his assistance, and at the end, Mr. Salif SACKO, who assisted and supported me during all this research and the field surveys.

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- 2 Mali Embassy in Japan web site: <http://www.ambamali.jp/geography.php> (2012.3)
- 3 UNESCO web site : <http://www.unesco.org/new/en/unesco/> (2012. 03)
- 4 The Sudano-Sahelian or Sudan Style Architecture is an architectural style common in the Sahel. The style reached its height during the Mali and Songhay Empires in West Africa during the 16th and 17th centuries. The Great Mosque of Djenné and Sankoré Mosque with its accompanying university buildings in Timbuktu are the most famous examples of the Sudan style architecture.
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- 6 Raoul SneIder, The Great Mosque at Djenne-Its impact today as a model- Pp.67
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CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND
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- 22 PRESERVATION OF CULTURAL HERITAGE AND LOCAL COMMUNITY DEVELOPMENT: HISTORY, IDENTITY AND MEMORY
Stalowa Wola-Krakow, Poland, May 29th-30th, 2008
An ARCADE event convened by The Agency for Technical Cooperation and Development (ACTED)
Le Centre Interdisciplinaire de Recherche Comparative en Sciences Sociales (CIR-Paris), European New Towns Platform (ENTP)
- 23 CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE WORLD HERITAGE COMMITTEE Thirty-second session Quebec City, Canada 2 - 10 July 2008 - Decision - 32COM 7B.50 - Old Towns of Djenné (Mali) (C 116 rev) 31 March 2009, <http://whc.unesco.org/archive/2008/whc08-32com-24reve.pdf> (2012.04)
- 24 CONVENTION CONCERNING THE PROTECTION OF THE WORLD CULTURAL AND NATURAL HERITAGE -World Heritage Committee Thirty-fourth session Brasilia, Brazil 25 July - 3 August 2010, (WHC-10/34.COM/20)
- 25 World Heritage Earthen Architecture Programme (WHEAP) <http://whc.unesco.org/en/earthen-architecture/> (2012.04)

Aga Khan Trust for Culture -MALI Earthen Architecture Programme Presentation

- 26 Rapport d'activités Octobre – Décembre 2008, Programmes des Interventions Réalisées et Travaux Futurs, Projet de Restauration de la Grande Mosquée, Djenné-Mali, Aga Khan Trust for Culture, 2009
- 27 Palm wood sticks (Toron) half embedded and rhythmically arranged on the wall surfaces. These sticks are needed on higher positions for the function of scaffolding on occasion of replastering the whole surface of the Great Mosque once a year. Therefore it was not necessarily required at lower positions, but gradually these sticks have come to be used as decorative elements even for low-rise mosques
- 28 Plan de Conservation et de Gestion des « Villes anciennes de Djenné » - Mali]2008-2012, Pp. 101 – 106, Dnpc 2008
- 29 Charlotte Joy -Heritage and tourism: contested discourses in Djenné, a World Heritage Site in Mali- ASA Conference 2007: Thinking through Tourism, Series F: Material Culture F3: Tourism, ethnography and the patrimonialization of culture
<http://www.nomadit.co.uk/asa/asa07/panels.php5?PanelID=196> (2012.04)
- 30 Amadou Tahirou Bah representing Djenné Patrimoine during a round table debate held in Bamako on the 21st May 1999
- 31 Angelika Wilcke DLG-Verlag GmbH Frankfurt/Germany, Mali tourism under terrorist threat, International Journal on Rural Development, Rural 1
<http://www.rural21.com/english/rural-round-up/detail/article/mali-tourism-under-terrorist-threat-0000109/> (2012.04)