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The Conundrum of Developing Country`s Heritage Tourism: How Tourism Destroys what it Tries to Preserve

Jessica Meado

Abstract

Organizations like United Nations Educational, Scientific and Cultural Organization, UNESCO, have joined with more than a hundred nations in order to develop sustainable preservation techniques for World Heritage Sites, thereby, allowing for a sites continued appreciation for future generations throughout the world. Heritage tourism purports to allow nations to benefit economically from investing in heritage sites as their continued preservation will increase tourist`s cultural motivation to travel to the country, resulting in increased cash flow into the country. However, as more and more tourists visit a location the more wear and tear is put on the site, thereby negatively effecting its preservation. In this thesis I argue that heritage tourism is a counterproductive endeavor with the long term effects being detrimental to the site itself, the surrounding area, and local communities regardless of the economic stimulation it brings to a country. This study reviews the current literature on the effects of heritage tourism and examines the World Heritage Site Angkor, located in Cambodia, as a case study. This case study demonstrates several of the negative economic, social and cultural effects tourists have on a locations and the level of administrative action needed to understand and implement courses of action to mitigate the problems. I conclude that developing countries have to pay both more economically and culturally than what is reaped from tourist revenue as the country already has a week economy, and that a strong governmental presence through protection policies must be utilized if there is any hope of mitigating preservation issues.

Introduction

In our ever more globalized world, the number of culturally distinct groups is diminishing. In order to combat against this effect organizations like UNESCO have joined with nations in order to try to make publically aware the importance of heritage preservation. Heritage, which includes tangible and intangible culture as well as nature (UNESCOb, UNESCOi), allows mankind to look at the past and to understand how it has formed into the present. Heritage is also a source of economic growth through tourism. In this thesis, I discuss some of the negative side effects of heritage tourism in less developed countries, by examining tourist interaction concerning their treatment of the site and relationship with the local community. Qualitative and quantitative data was collected from textual sources documenting the economic, social, and physical effects of tourism on heritage. The site of Angkor in Cambodia serves as a case study providing site evidence demonstrating several key preservation issues that arise from tourist interaction. I argue that heritage tourism in developing countries is a counterproductive system, with the long term effects being more detrimental to the site itself, the surrounding area, and locals regardless of the economic stimulation it may bring.

In this paper I first discuss the growth of the tourist industry and define heritage tourism as a form of tourism. Second, I provide the background for how heritage preservation became a world wide movement through the creation of the United Nations

Educational, Scientific and Cultural Organization (UNESCO) World Heritage List of monuments. Third, the negative and positive outcomes of heritage tourism are laid out. Forth, I discuss how the World Heritage Site Angkor serves as a study for preservation problems and how management mitigates the given problems. I conclude that developing countries have to pay both more economically and culturally than what is reaped from tourist revenue as the country already has a week economy, and that a strong governmental presence through protection policies must be utilized if there is any hope of mitigating preservation issues.

The Growth of Tourism and Heritage Tourism

In the worlds ever increasing fast-passed, mobile society, it is easier than ever before for individuals to access once remote and distant places around the world. Tourism, historically seen as a luxury for the few, is now available to a larger numbers of people. Combining vast amounts of information only a mouse click away, with an individual's motivation for travel, narrowing down possible destinations is almost the hardest part.

Tourism is the fourth largest industry in the world (Makhlouf 2012), and is consistently increasing participation and revenue. The 2011 report from World Tourism Organization (WTO) (2012) states that "International tourist arrivals reached a record 982 million, an increase of 4.6% on 2010, while receipts grew by 3.8% to US$1.030 billion". Although still amounting for 73% of the total tourist recipients, the Americas and Europe have slowly been decreasing percentage wise due to advancements in tourist opportunities in developing countries (WTO 2012). The decline in Western tourism is occurring due to national governments pushing for investment in the tourist industry. Developed nations and organizations such as the World Travel and Tourism Council also recommend to developing nations that they invest more into local tourist opportunities (Costache 2012).

Now that the numbers have been given demonstrating the increasing desire to travel, the motivations for said desires should be established. An individuals motivation for tourism is often reflected through the choices he or she makes in selecting locations and activities. McIntosh (qtd. in Mathieson 1982) states that one`s motivation for travel falls under a physical, personal, prestige and status motivation, or cultural. Physical motivations involve travelling for relaxation benefits to the mind and body or sports activities. A personal motivation would be visiting friends or family, religious pilgrimages, or traveling for the fun of it. Traveling for business, conferences, or educational reasons are prestige and status seeking. Cultural motivations include interest in other cultures, festivals, art, and historical monuments. Heritage tourism is the distinct name given to the monuments and festivals that are traveled to under cultural motivations.

Although the definition of heritage tourism is constantly contested, Poria et al. (qtd in Timothy 2003: 6) defines heritage tourism as, "a subgroup of tourism, in which the main motivation for visiting a site is based on the place`s heritage characteristics according to the tourists` perception of their own heritage." In other words travelers choose certain historical and culturally relevant attractions because of their cultural motivations to either see a connection to their own past or in order to understand the differences that exist in contrast to their own heritage. In 2004 the World Tourism

Organization stated that, "20 percent of tourist visits to Europe have cultural motivations; 60 percent of European outbound tourist have cultural motivations in their visits to other part of the world; and 40 percent of all international trips contain heritage as a component" (Baxter 2010).

Research on the effects of heritage tourism and tourists are important to the maintenance of sites so that tourists can continue to visit heritage sites. Two of the most immediate stakeholders in heritage preservation, besides the local community and home countries economic reliance, are archaeologists and anthropologists. Archaeologists play an exponential role in the general publics understanding of the site. Although contemporary societies may still hold onto traditional practices that can be linked to ancient heritage sites, archaeologists job is to find, record, and decipher heritage sites (Okamura 2010). Although archaeologists and anthropologists are elated to see tourists' cultural interest, the negative effects of tourist presence at sites strain the two groups relationship. Because it is these two academic fields job to record tangible and intangible culture, it becomes frustrating when sites are physically damaged and current cultural practices changed or lost due to acculturation through tourist, native interaction.

Aside from academic research, archaeologists and anthropologists also act as consultants for mitigating tourist actions on site maintenance (Nash 1996). Implementing a carrying capacity (Nash 1996), where a set maximum number of tourists allowed entrance into a site each day is set, was suggested by an anthropologist.

UNESCO History & The World Heritage List

In 1972, the United Nations special agency, United Nations Educational, Scientific and Cultural Organization, UNESCO, held The General a Conference in Paris (UNESCOb). During this conference, members deliberated over the concept of heritage and the growing need to protect and preserve key culturally important sites across the world. Under Article 1 of the United Nations Educational, Scientific and Cultural Organization, UNESCO, 1972 World Heritage Convention, cultural heritage is defined as monuments, groups of buildings, and sites that are exceptional representations of their given architectural and artistic style. Article 2 describes natural heritage as natural features and geological formations where natural beauty, unique ecosystems and social relevancy are evident (UNESCOb). Since the acceptance of the 1972 World Heritage Convention, 190 states have ratified the document. To date there are 962 properties (representing 157 states) included on the world heritage list, "including 745 cultural, 188 natural and 29 mixed properties" (UNESCOg). The 1972 conference was initially only concerned with tangible heritage (sites and artifacts) and natural heritage. It was not until 2003 that intangible culture, such as music, dance, and craft production, was included in this systematic form of heritage preservation (UNESCOi). Intangible cultural heritage is "the practices, representations, expressions, knowledge, skills as well as the instruments, objects, artefacts and cultural spaces associated" (UNESCOi), with a community and passed down through the generations. Some examples of intangible heritage include oral traditions, dances, and way of preparing food.

The catapulting moment that spurred the attention for the need for safeguarding cultural sites was the construction of the Aswan High Dam in Egypt in 1960 because of its resulting effects on surrounding archaeological sites (UNESCOe). Throughout the country`s history, Egypt has relied heavily upon the Nile River for transportation and

food resources. Construction of the Aswan High Dam began in 1960 and was completed in 1971. The dam provided Egypt with a way to contain water during flooding season, have a reservoir during draughts, increase crop yield due to irrigation, and develop hydroelectric power (Hassan 2007). Consequently, surrounding sites were submerged in the dam's reservoir and in turn created a campaign mounted to salvage the threatened archaeological sites. "The Nubia Campaign …was the first collaborative international rescue effort involving UNESCO" (Hassan 2007:73). Through multinational financial donations from 45 nations, a total of 23 temples where cut, moved, and reassembled away from their original location in order to prevent water damage (Hassan 2007). Based on this successful preservation campaign, UNESCO and like organizations, such as The International Centre for the Study of the Preservation and Restoration of Cultural Property (ICCROM), have grown in importance for the safeguarding of the world`s heritage.

In order for a cultural and natural heritage site to be accepted onto UNESCO`s World Heritage List, the site must be nominated from a country that has already signed the World Heritage Convention. The first step for the country is to compose a list of sites that are believed to be significant to all of mankind (UNESCOh). Each country that has signed the World Heritage Convention has a Delegate Ambassador to UNESCO. These delegates are the individuals that determine what sites are to be included on the preliminary list for consideration (UNESCOd). Once a list is created, nomination files are submitted to the advisory boards for evaluation. Upon evaluation, the advisory boards sends their recommendation to the World Heritage Committee who deliberate over the acceptance of the site through the requirement of meeting one out of the ten criteria for selection. (UNESCOh). A site must be of "outstanding universal value" (UNESCOc), through its uniqueness or exemplary quality in style and form via a manmade entity or natural occurrence.

As previously stated, cultural motivations are one of the most significant individual motivations for tourism, resulting in thousands to millions of tourists walking through heritage sites each year. When a site is accepted onto UNESCO`s World Heritage List, a sense of prestige is distinguished upon it and is often used as a marketing strategy to intise tourist to this now culturally renowned location (Timothy 2003). It is estimated that nearly two thirds of World Heritage Sites experienced an increase in visitor numbers once added to the list (Timothy 2003). However this increase comes at a price. Regardless of the cash flow heritage tourism brings with it, the negative effects of tourists presence has to great of a potential to out weigh any of the benefits. Also, in order to fix many of the negative outcomes, the home country will have to funnel what was earned through tourism right back into the tourist industry just to fix the problem rather then distributing it to other government needs.

Negative Effects of Heritage Tourism

Although clearly a huge contributor to the economic system, with over $1 billion in revenue (WTO 2012), tourism also raises several problems with concern to effects on the site and surroundings, native population, and tourists experience. Seeing that developing countries rely heavily upon their culturally distinctive past to advance their heritage tourism, it is imperative that the countries sites be aesthetically preserved.

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However, as discussed in three of the following subsections, tourists create negative impact on the preservation of the site.

The push for expansion in tourism in many developing countries has put less emphasis on other industries such as agriculture. Although thousands of people continue to be needed to build the infrastructures of tourism through buildings and roads, this mass shift creates too much of a reliance on an ever fluctuating structure. When a smaller or developing country relies to heavily on tourism they become economically dependent on the tourist industry and are defenseless against external factors that could decrease tourist numbers (Makhlouf 2012). The future is an unpredictable force and as such relying on a fluctuating industry like tourism that is dictated by seasonality, tourist interest, and outside forces such as war and natural disasters makes depending on tourism for economic stability a risk.

Disclaimer

Before discussing my findings it should be noted that many of the issues that I will be discussing do occur in developed countries. I focus on developing countries because the impacts in these countries are on a larger scale and more greatly affected by the countries diminished access to resources.

Economic impact

National and global governments along with travel organizations push for development in the tourism industry because of the potential to bring in millions of dollars in as revenue. However, this revenue does not take into account the millions needed to build, restore, advertise, and set up site management, nor does it outline where all this money will come from. Already a hard commodity in developed countries, funding for preservation and conservation is even scarcer in developing countries (Timothy 2009). It is hard for developing countries governments to justify allocating vast amounts of money to spend on preservation when there are many other pertinent issues at hand to deal with such as hunger and diseases. Not only does the lack of funds for site preservation result in less being preserved but it also affects the quality of preservation. When there are inadequate funds short cuts are often implemented. These cuts may include fewer guards hired to monitor the site, lower quality restoration materials, and hiring inadequate conservators with low training level of restoration studies (Timothy 2003). Collectively, these factors contribute to the potential for improper conservation that in the end has the potential to cause more damage than if the site had not had additional work done to it.

Most developing countries do not have the resources to fund tourism expansions and must rely on third party investors, such as other countries or organizations like the International Monetary Fund (Costache 2012). Unfortunately, such borrowing adds to the countries debt because as some scholars are finding, revenue from tourism is not substantial enough and the country must continue to borrow (Costache 2012). Also, in some countries, like South Korea, more citizens are traveling then the number of tourist coming into the country, thereby resulting in an imbalance of tourist spending that further contributes to the countries deficits (Costache 2012).

Another factor that debunks the notion that tourism is an economic boost is the misguided perception that economic growth automatically makes the residents richer

(Sahli 2007). There are two contributing elements that make this problem so. The first is something deemed the "leakage" problem (Carbone 2005:560). Leakage refers to the money that comes into a country via tourist dollars and does not necessarily stay in the given country being visited. This can be seen through international chains and corporations in hotels, tourist management, and airline industries (Carbone 2005). Secondly, although these foreign operators hire natives, the increase of development in tourist locations also increases worker migration flows to the area (Sahli 2007). Although these new industries create more jobs, more people flock to these regions than there are available jobs.

Sahli (2007) summarizes Harris and Todaro`s work on the migration of developing countries native population from rural to tourist urban centers. The decision to migrate is based on perceived economic benefits with the idea that workers can get paid higher wages in urban settings. However, this is only the case if the individual is able to secure a job. Not only do people have to compete with fellow citizens, many must also compete with illegal immigrants who will work for less pay (Sahli 2007). Not finding a job is a risk thousands make when moving into the urban setting and results in thousands living in poverty, which manifests into social consequences that will be discussed later in the paper.

Social impact

Although not a new concept, modern globalization has been occurring at an exponential rate (Mowforth 2009), due to increased cross cultural interactions and thereby resulting in an ever homogenizing world. Tourism is a form of globalization in that "it is not just capital and commodities that can be transported and transferred easily across the world, but tourists too (Mowforth 2009:13). This means that as representatives of their home country, tourists bring with them their own cultural norms, that if different from the host country have the potential to reshape the native people due to the native adopting the tourist's behavior. Globalization resulting in the acculturation of Western ideals not only occurring at a local level due to incoming tourists but also natives who leave on travels on his or her own and bring back new ideals.

But are heritage sites preserving and representing cultural truth or just what tourists want to see? Tourism as a whole is driven by profit. Heritage tourism is no exception and thereby has the potential to be detrimental to the locals interaction with their own culture. Through heritage tourism, culture becomes a product rather than an educational experience. "Lack of ownership of culture is one of the most often cited frustrations among indigenous peoples…were culture as a tourism resource is controlled by outsiders" (Timothy 2009:62-63). Because heritage sites are seen as a product that the tourist pays to experience, the tourist to an extent determines how the culture will represent itself. Traditional art forms that tourists buy as souvenirs become standardized and mass-produced thereby losing their value (Timothy 2009). Designs are also changed in order to meet tourists taste in style. This can result in natives losing knowledge of traditional designs and their meanings (UNEPa). Since natives have to conform their daily practices to what tourist want to see their culture becomes stages and unauthentic.

Many communities in developing countries rely on heritage sites for income, due to the practice of cultural commodification the relationship between natives and tourists is not always ideal (Timothy 2009). Not only do natives have to simplify their traditions for

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tourist entertainment, they also may have to worry about visitors "taking the culture away" (Timothy 2009:63), via filming and picture taking, and may misrepresent them. Besides misrepresentation, the relationship is also affected by culture clash due to tourists ignorance of accepted customs such as behavior and dress (UNEPa).

Looting is another way that culture is taken away from sites. Although looting takes place on a worldwide level, developing countries experience it the most due to the lack of political regulations and funding for site guards (Renfrew 2000). As stated earlier, worker migration flow to surrounding areas of heritage sites results in extensive population growth and not all individuals secure jobs. Therefore, to supplement their lack of income many turn to looting their own cultural materials to sell on the black market (Timothy 2009).

Physical Impact

Looting is also one of the numerous factors causing negative physical impact to sites. Looting affects sites in regards to components of the site being removed from their original context. Because of object removal, the entirety of the site cannot be seen or functions understood. When whole chases of material goods are removed from their context, archaeologist can only at best guess at what the function of a given location might have been. Aside from looting, heritage sites are also under attack from the flow of visitors, their potential destructive tendencies and environmental impact they create though development growth, war and acts of Mother Nature (Timothy 2003, Timothy 2009).

The wear and tear of simply walking around a given site year after year results in tourist wearing down the paths, steps, and architectural elements (Timothy 2009). Just as the bottoms of our shoes lose tread and smooth the longer we wear them, the more the same area is walked over the smoother it becomes. In the past, and currently in areas like developing countries that lack sufficient guards, visitor's actions were less monitored. It was not uncommon to see a fellow traveler climbing on structures and touching monuments (Figure 1). Because of this, structures have become less stable and are more likely to fall over (Timothy 2003).

Aside from structural deteriorations, decorations including carvings and paintings have been worn down as the result of constant touching (Timothy 2003). Another agent that affects these surfaces is moisture control. Unlike museums that have the capabilities for temperature control and casings, most heritage sites our out in extreme locations such as caves and tombs that do not have the luxury of giving artifacts ideal climatic conditions (Timothy 2003). The more people that are crammed into these small areas the more condensation build up there is on the walls with the paintings (Timothy 2003).

Some tourists directly compromise sites through acts of vandalism. Graffiti can be found at numerous sites throughout the world and on various scales. More often than not the damage done cannot be removed as further damage would be implemented onto the surface due to removal options consisting of either sand blasting or cutting away the damaged section (Timothy 2003).

Littering, like vandalism, is another corrosive and financially burdensome product of unmindful tourists. The consequences of littering occurs in a variety of ways. Not only does litter take away from the aesthetic beauty of the site through creating visual distractions due to the clutter, but it also results in damaging affects to the site and the

environment. Already working under limited budgets, for many sites in developing countries, having to allocate money to additional garbage pickup is both time consuming and an unnecessary expense compared to if tourists simply disposed of the trash properly in the first place (Timothy 2009).

As stated above, littering also impacts the wild life surrounding sites. By leaving trash behind, tourists and natives not only destroy habitats but alter traditional feeding habits, making the animal semi-dependent on humans for food (Mathieson 1982). And like the looting of artifacts, exotic animals get commodified and are sold on the black market or killed for their prized tusk, furs, etc (Mathieson 1982). Altering the ecosystem also wreaks havoc on locals who rely on them from income and nutrition.

The industry of tourism as a whole immensely impacts the environment simply for being built. As stated earlier, the economic possibility heritage tourism has creates a developmental boom. Because industrial development, deforestation and the purchasing and development of farmland occurs, thereby reshaping the areas ecosystem. The increasing population brings with it more littering, increased carbon footprint via extensive motor and air transportation, and industrial factory wastes. Chemicals and other released pollutants have the capabilities to deteriorate elements. Using the Taj Mahal as an example, Ganguly (Timothy 2003), states that acid rain created from local factories and oil refiners are decomposing the site.

Besides tourists' contribution to environmental issues, Mother Nature is a destructive force all on her own. Not only can tornadoes, hurricanes, earthquakes, and floods decimate sites but natural vegetation growth due to the lack of maintenance grows over sites. Cases of vegetation overgrowth at sites is usually because of the site being historically forgotten or abandoned and then rediscovered years later with the overgrowth already in progress. Trees grow on top of the features that can break under the weight or be displaced by the roots. The additional problem that arises from these circumstances is the structural balance between the architecture and the tree (Timothy 2003). Conservationist confront a dilemma when they must determine if saving the tree will result in the structure collapsing in time or if the structure now needs the tree for support where removing might then cause a collapse (Timothy 2003).

Benefits of Heritage Tourism

Although there are many negative effect of heritage tourism, there are also benefits to the industry as well. This can be seen through the continued connection locals have to their past via preservation efforts, strengthening community development and increased chance for economic prosperity.

Before becoming tourist commodification's, heritage sites were, and many still are, an essential cultural center for locals day to day life, whether evident in the ancient past or still continuing today. Maintaining native culture has become more difficult in the past century because of increased globalization. The dilemma with globalization, and the role tourism plays in it, is determining whether its effects are good or bad and to what degree. Although a form of globalization, tourism actually has two conflicting outcomes. One, being its homogenizing tendency and second its push for heritage preservation and heritage tourism. Even though tourism increases globalization it has also increased the motivation for the preservation of the ever diminishing entities that exemplify cross cultural differences via the focus on heritage tourism (Holtorf 2010). Heritage sites allow

tourists and natives to "[reaffirm] their own identities" (Holtorf 2010:46). In short heritage tourism allows tourists to see how they are different while natives simultaneously see a connection to their past. By preserving heritage sites the effects of globalization are postponed to an extent.

Heritage sites allow locals to confirm their identities because as culturally significant sites the locations evokes a sense of pride and distinction due to symbolic importance. Objects and places become symbolically important and therefore part of our identity because of the relationship they hold to our understanding and interaction with the world. The experience of place attachment occurs, according to Relph (1976: 141), because "places are not abstraction or concepts, but are directly experienced phenomena of the lived world and hence are full with meaning, with real objects, and with ongoing activities". Heritage sites are essential to our identity because they are physical markers of our past (Timothy 2003), and in our ever globalizing world it is our past that is going to set us apart from others and reaffirm our identities (Holtorf 2010). Because of this reaffirmation, heritage sites must be preserved.

Heritage tourism, because of its ability to establish likeness and difference across cultural groups, is an essential educational tool. Through increased interaction between native and tourist populations cultural understanding and reduced prejudice feelings can be instilled in the groups as they get to know each other more (UNEPb). Because heritage tourism has the ability to foster cross cultural acceptance through native and tourist interaction, heritage tourism is seen as a form of peace (UNEPb). The first Global Summit on Peace through Tourism said, "Peaceful relationships among all people should be promoted and nurtured through sustainable tourism" (qtd. in UNEPb). In other words, it is through tourism that the people of the world interact with one another on a personal level. As such tourism is a way that mankind can foster understanding and friendships with those that are not like you. The more people understand the differences between cultures the less likely people will succumb to believing in hurtful stereotypes against other groups.

Not only does heritage tourism strengthen the ties between outsiders (tourists) and insiders (locals), but the development and management process of tourism also fosters increased community ties (UNEPb). Increased tourism can actually encourage the resurgence of cultural aspects like festivals (UNEPb). Although historically not included in the decision processes of management, local people are increasingly becoming involved in how their culture should be represented to the tourists (Mowforth 2009). By being involved it allows the local to take back their culture by not allowing tourists to control how traditional art forms are represented and to make sure that tourist guide information is correct.

Tourists not only gain cultural and historical knowledge through their visit of heritage sites but they are also exposed to any conflict that may be present in the given country. Conflicts could include any number of issues ranging from preservation needs, natural disasters, disease, war, food shortage, child labor, and other numerous quality of life issues. By witnessing any potential conflicts, the conflict is brought to an international audience. This either puts pressure on the given country to correct the issue themselves or it may result in international aid.

Heritage tourism is also important because of the economic prospect it brings to the given country at large but also to the local community. Economic growth through

tourism is especially felt in developing countries, as heritage sites are one of the few things these countries can capitalize on. "Tourism (has become) a key foreign exchange earner for 83 percent of developing countries and the leading export earner for one-third of the world's poorest countries" (qtd. in Makhlouf 2012:234). As tourist numbers continue to increase and tourists continue to travel outside of Europe and America, as the statistics at the beginning of the paper demonstrate are currently happening, developing countries can project to continue a steady increase in income from tourist spending.

Angkor: Case Study on to the effects of tourism and forms of Mitigation

Located in the Seim Reap Province of northern Cambodia, the site of Angkor provides an exemplary case study on the delicate and often contradictory relationship between the preservation of heritage sites and tourism. With the combination of its unknown near abandonment between the 15th and 17th century, and further lack of maintenance and resulting damage from the Khmer Rouge Rebel war throughout the 70`s and 80`s, the level of preservation at Angkor was dismal (Fletcher 2007 and Sun 2006). Following the end of the war both national and international interest in site revitalization has generated several organizations, legal advancements, and research opportunities to preserve, document, and understand the art and architecture of the site. It is through these advancements that one can see both the good and bad sides of preservation and the role tourism plays in it.

Angkor exemplifies the architecture of the Khmer Empire to which it was the capital city from the 9th to 15th century (Sun 2006). Covering nearly "400 square kilometers and consists of scores of temples, hydraulic structures (basins, dykes, reservoirs, canals) as well as communication routes" (UNESCOa), Angkor is a testament of ancient engineering and urban living. Not only is Angkor significant due to its architectural achievements but also because it is a living, religious, and natural site (Sun 2006). Thousands of locals, both ancient and current, have made this forested and rice paddy area their home. Buddhism is also heavily practiced here as locals and pilgrimages come to see the many structure that are dedicated to Buddhist gods (Sun 2006). The symbolism of this site can also be felt at a national level regardless of living proximity or religious affiliations due to the three towers of the temple Angkor Wat being portrayed on Cambodia`s national flag (Fletcher 2007).

Because the Khmer Rouge Rebel war began in the 1970`s, at the same time that UNESCO was starting its worldwide mission of heritage preservation, Cambodia did not have the resources or the time to follow other participating nations. With war, concern for site preservation becomes of little concern as money and law enforcement was needed for everyday wellbeing (Fletcher 2007). This is not to say that anger is not felt when sites are destroyed and artifacts taken, just that in a state of turmoil the justification and manpower for stopping such action is often lacking. Therefore, not only does a site further deteriorate due to lack of maintenance but war wreaks havoc on the site itself. Heritage sites are often intentionally destroyed due to the conflicting sides view on its history or, like in Angkor`s case, a site is an innocent casualty (Timothy 2009). Several monuments are now riddled with bullets and wood ceilings and joints dismantled for use as firewood (Timothy 2009).

Once the war was over, there was surge of support for the immediate advancement in the preservation of Cambodia`s heritage. Angkor was nominated to be

included as a World Heritage Site in 1991. Due to its level of degradation, Angkor was accepted in 1992 to the List of World Heritage in Danger (UNESCOa). "Inscribing a site on the List of World Heritage in Danger allows the World Heritage Committee to allocate immediate assistance from the World Heritage Fund to the endangered property" (UNESCOf). It also alerts the world as a whole to the problem that is ensuing and alerts conservationist to the need for their expertise and assistance. To insure that the site would be worked on with relative speed and efficiency, UNESCO and advisor groups required Angkor to create protective legislation, a qualified staffed protection agency, defined boundary with defined levels of preservation needs and a buffer zone between the site and any nearby settlements, and monitor international conservation efforts (Sun 2006).

Cambodia takes a holistic approach to their implementation of heritage tourism. They believe that the preservation of the past should not come at the expense of potential economic gain as nature and culture are irreplaceable (Sun 2006). Therefore, policies and procedures must be for the benefit for long term maintenance of the site. Using GIS and satellite imagery, researchers are better able to see the damages done, determine what the cause is and begin devising a plan of action to correct it.

Although most tourists come with the good intent to learn from heritage sites and are essential to the maintenance of the site through iterance fees and donations, they are also one of the biggest destructive forces to the site. Because tourism requires the construction of roads and buildings, GIS and satellite images were used to monitor expansion changes and its effect on the site and surrounding environment. Siem Reap, the neighboring community to Angkor, grew in population "from 75,000 in 1992 to about 110,000 in 2002" (Fletcher 2007). This excludes the tourists who make this area their home for a couple of days while they travel. Tourist numbers have increased from "9,000 in 1993 to about 750,000 by 2003" (Fletcher 2007), to a little over a million currently. Through this development one will see that the urban growth next to the site is starting to encroach on the cultural space of the site and affects the experience of tourists as well as physically harms the site (see Figure 2). Thematic mapper (TM) images were also used to record the changes in vegetation through deforestation in order to build and increased agriculture in certain areas in order to provide for the growing population (Fletcher 2007) (see Figure 3).
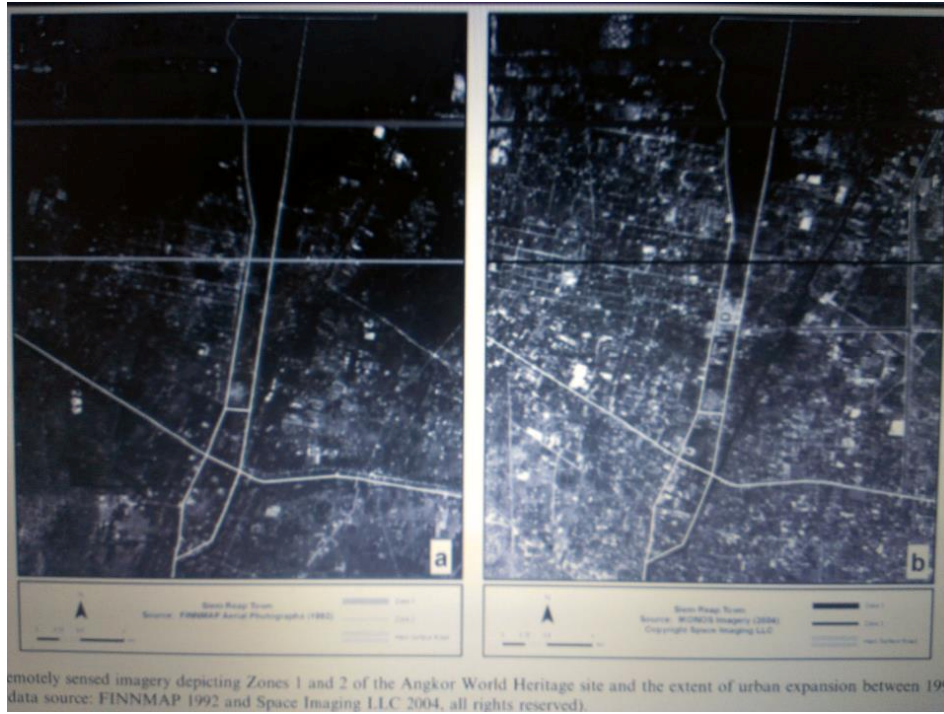
Figure 2. FINNMAP and Space Imaging LLCC of urban expansion between 1992 (a) and 2004 (b) (Fletcher 2007)

Figure 3. Vegetation change. Brighter value indicates vegetation loss, darker vegetation gain, grey is minor or no change (Fletcher 2007).

It has also been found that more tourists visit the site at specific times during the day. This time fluctuation is connected to the sunrise and sunset (Fletcher 2007). This becomes a problem as increased traffic is both inconvenient due to waiting and dangerous because of added motorists. Tourist flow throughout the site is also crucial as the wear and tear of the most popular structures within the site become worse while other less visited structures hardly get noticed for their significance as well. To manage the flow of tourists, the Authority for the Preservation of the Site and Management of the Region of Angkor, APSARA, partnered with tour guides to space out group timing and temple visits so that one temple is not continuously extensively overcrowded (Sun 2006).

Looting is another way that a site is physically impacted. Not only do tourists sometimes try to take small mementoes from the site but there is also a black market for artifacts. During its decades of war, sites all throughout Cambodia faced extensive looting problems. Since the end of the war and the acceptance as a World Heritage Site, Cambodia has taken numerous measures to insure that the remaining elements will not be taken and to locate stolen items. The Law on the Protection of Cultural Heritage in Cambodia states that each individual object is protected property, unlike other countries artifact grouping system (Sun 2006). Because every object is protected individually this meant that there must be a working knowledge of all said objects. This database of objects is being compiled on a collaborated level between Cambodia and French preservation experts and funding (Sun 2006).

The purpose of this database is to catalogue what the site has, therefore making it easier to search objects if they are found out of context to see if they match the sites records. Besides its monitoring purpose, this database will also allow researchers to have access to the sites layout and decorative motifs, thereby making it easier acquire data for research.

Although having a data collecting of all objects is a step in the right direction for knowing what objects are missing, this is not enough if there are not policies dictating the return of items after they have been located. Because of this, Cambodia has conducted several campaigns to educate the antique market, museums, and general public the world over to recognize Khmer artifacts taken from Angkor and to dissuade further purchasing of said items (Sun 2006). Since the start of these campaigns and the publication of a book including pictures of some of the looted items a few have been returned to Angkor. But how can we stop looting from happening in the first place?

Guards are an essential part of the protection of sites as they monitor the activities of visitors. In 1993, France trained and financed the creation of Heritage Corp Police which now enlists 527 policemen (Sun 2006). Tourists are also in a sense guards in that the more consistence visitor flow there is a site the more eyes there are to see any potential stealing, therefore making it harder for the looters (Sun 2006). Unfortunately, because tourist flow is often centered on particular sites, lesser sites are starting to get looted more frequently. This is another reason why tourists flow needs to be spread out. Not only so that the wear and tear of popular sites can be lessened but also keep a watchful eye out for wrong doings.

Other preservation issues at Angkor include the effects of Mother Nature due to negligence. Several temples are being engulfed by trees and as a result of their weight and root systems architectural structures are weakening, being crushed, or displaced. The conundrum for conservationists is whether or not the trees should be removed. This is

one case where constant human interaction with a site might be beneficial as the sapling most likely would have been removed before growing so large.

There have also been cases of several preservation mishaps. Although with the best intent of removing fungus from structures, conservators working on this task used sodium pentachlorophenate and zinc siliofluoride and then applied a sealant to the stone surface to insure that fungus would not grow for another few years (Timothy 2009). However, other conservators did not agree with this method because they believed it actually deteriorates the surface more and that the sealant has too great a potential to trap moisture behind it. This would result in fungi growing under the sealant that takes years to wear off, thereby resulting in crack and further damage that just takes longer to show up (Timothy 2009). In other parts of the Angkor, concrete was used to reinforce walls, create structural reliefs and roofs. Not only is this material not used in the original creation but it also covered irreplaceable art work (Timothy 2009).

In short, although Angkor still has its own preservation faults it must be said that they provide an extensive and comprehensive study for what a site and country must do in order to preserve for the future. By utilizing international help, policies, data collection, and outreach programs, Angkor has been able to move out of the World Heritage in Danger category.

Analysis: Angkor and Other Preservation Techniques

Through the analysis of satellite imagery, the physical appearance of the structures, and the policies implemented in order to try to mitigate against preservation problems, the World Heritage Site at Angkor, Cambodia, provides strong evidence for the level of organizational and governmental cooperation needed to maintain the preservation and protection level necessary for a heritage site. By analyzing visitor temple preference, the Preservation of the Site and Management of the Region of Angkor was able to determine that certain temples were being visited far more frequently then others (Sun 2006). This unequal distribution of tourist flow creates greater wear and tear on the more frequently visited temples compared to the lesser temples. By following what Angkor did to try to fix the tourist flow, partner with tour guides to spread tourist throughout the complex, other sites facing this same problem will start to see a more equalized tread in wear in tear. Although no wear and tear is good, anything that can postpone main structures from acquiring substantial damage that would result in closing down visiting the site is needed.

In order to make sure that sites are being well protected, having a plentiful amount of security guards located throughout the entire complex is essential. By employing Heritage Corp Police just for Angkor, local police force does not have to be called upon to deal with problems at the site, as there are already police there. Also, with a constant police presence, looting is less likely to happen and unruly tourists dealt with and stopped from climbing on structures that could become weak and fall.

Another aspect that is important to prevent looting, and something that Angkor does very will at, is implementing international campaigns that educate the art and antiquity world as well as the public of the looting problems that go on at the site. Because Angkor has an item-by-item inventory, it makes it more manageable to keep track of objects and if one does go missing the world at large has a database it can look at to see if the objects came from Angkor.

The above policies used by Angkor are just a few of the ways that the integrity of a given site can be protected against negative tourist interaction. Another solution suggested for decreasing the wear and tear on a site besides spreading tourist flow throughout the complex is establishing a carrying capacity. Carrying capacity refers to the maximum number of people that a given site can handle before extensive damage and visitor experience is affected (Mathieson 1982). But should there be a cap on the number of people that are allowed onto sites within a given day? Problems that arise with implementing a carrying capacity is that it is unfair to the tourists that travel to the surrounding area specifically so visit the particular site that now admits a certain number of people, so what if the traveler does not get there in time and has to leave the next day. It is also believed that in order to make up with the revenue lost from having decreased tourist numbers that the entrance fee will be to high for many to pay, thereby making heritage sites only accessible to the rich (Mathieson 1982). However, carrying capacity at one site opens up the potential for lesser visited near by sites to increase tourist numbers.

A case study for the implementation of carrying capacity is the Incan site of Machu Picchu in Peru, which is a mountain top city that draws in thousands each year. Due to a visitor growth of 6 percent each year, the site and its 8,200 steps to reach the summit are eroding at an alarming rate (Johanson 2012). To combat against this the National Institutes of Culture (INC) and Machu Picchu Historical Sanctuary Management Unit (UGM) have restricted the daily visitor number to 2,500 (Wanderlust 2011). Although this has upset numerous travelers, this is a necessary step in trying to preserve what is still accessible while thinking of the next step of preservation that needs to be implemented. And although this takes away from the economic profit that Machu Picchu stimulated in the past, the INC and UGM hope that this limit will encourage visitor expansion to neighboring sites.

If cutting back tourist number is not enough for preserving a site than the extreme measure of closing the site might be implemented. An example of this would be Lascaux cave in France. Discovered in 1940 and then closed to the public by 1963, Lascaux stands as a testament to the negative impacts of excessive tourist interaction with a site that actually resulted in the closing of the site (Lichfield 2010). Receiving thousands of visitors a year while it was open, the cave and its 900 plus 18,000 year old paintings were compromised by the condensation and CO_2 build up due to so many people breathing in the tiny space, thereby resulting in fungus build up (Lichfield 2010).

Conclusion

In conclusion, tourist interaction with heritage sites has a direct effect on the preservation of the site. As demonstrated in this paper, negative effects of heritage tourism, including economic risk, tourism as a form of globalization the causes part of the native culture to be lost, and physically wearing down the site, are all felt ten fold in developing countries due to the countries already low economy relying on third party investors to jump start the increase in heritage tourism industry, thereby resulting in more debt for that developing country. Therefore, making the claim that increased heritage tourism in developing countries will be a good economic investment.

However, heritage sites do need to be protected because of the educational and cultural value of the site, that through tourism fosters a cross-cultural understanding between the tourist and the host. This creates the conundrum of weighing potential

economic gain and cross cultural understanding against all the money it takes to build the tourist industry and then trying to maintain it once tourists start arriving. Although a supporting national and local government and strong site management policies must be in place to help mitigate the wear and tear tourists have on a site, educating tourists on the destructive role they play must also be implemented. Tourists need to be reminded that although on an individual level them touching the wall relief or climbing on part of the architecture might not be to detrimental to the site it is the collective result of thousands to millions of tourists that do not think about the effects of touching and climbing that sites become less stable.

Because people are not going to stop traveling anytime soon, it is important that tourist with a knowledgeable of preservation dilemmas be created now. Tourists must keep in mind that what they are visiting belongs to another culture and that the natives that the site "belongs" to deserve the tourists respect by not destroying part of the natives culture and therefore identity.

References Cited

Baxter, Ian
  2010 Global Heritage Tourism: The Value of Experiencing the Past. *In* Heritage Values
    in Contemporary Society, George Smith, Phyllis Mauch Messenger, and Hilary A.
    Soderland eds. Pp. 241-254 Walnut Creek, CA: Left Coast Press.

Carbone, Maurizio
  2005 Sustainable Tourism in Developing Countries: Poverty Alleviation, Participatory
    Planning, and Ethical Issues. The European Journal of Development Research
    17(3):559-565.

Costache, Sorina
  2012 Tourism, Friend or Foe to the Economic Sustainability of Developing Countries?
    Romanian Economic & Business Review 7(2):60-76.

Fletcher, Roland, et al.
  2007 Living with Heritage: Site Monitoring and Heritage Values in Greater Angkor and
    the Angkor World Heritage Site, Cambodia. World Archaeology 39(3): 385-405.

Global Heritage Fund
  n.d. Saving Our Vanishing Heritage: Safeguarding Endangered Cultural Heritage Sites
    in the Developing World.

Hassan, Fekri A.
  2007 The Aswan High Dam and the International Rescue Nubia Campaign. African
    Archaeological Review 24(3/4):73-94.

Holtorf, Cornelius
  2010 Heritage Values in Contemporary Popular Culture. *In* The Heritage Reader.
    Graham Fairclough, et al eds. Pp. 43-54 New York: Routledge.

Johanson, Mark
  2012 Has Machu Picchu, The "Lost City of the Incas," Become a Victim of its own
    Success? Electronic document, http://www.ibtimes.com/has-machu-picchu-lost-city-
incas-become-victim-its-own-success-758399, accessed February 26, 2013

Lichfield, John
  2010 Closed to the Public, but Sarkozy Gains Access to Threatened Cave Art.
    Electronic document, http://www.independent.co.uk/news/world/europe/closed-to-the-
public-but-sarkozy-gains-access-to-threatened-cave-art-2077575.html, accessed 5/8/13.

Makhlouf, Hany H.
  2012 The Multi-Dimensional Impact of International Tourism. International Business
    & Economics Research Journal 11(2):233-240.

Mathieson, Alister and Geoffrey Wall
  1982 Tourism: Economic, Physical, and Social Impacts. Harlow, UK: Longman
    Scientific &Technical.

Mowforth, Martin and Ian Munt
  2009 Tourism and Sustainability: Development, Globalization and New Tourism in the
    Third World. New York: Routledge.

Nash, Dennison
  1996 Anthropology of Tourism. Tarrytown, NY: Pergamon.

Okamura, Katsuyuki
  2010 A Consideration of Heritage Values in Contemporary Society *In* Heritage Values
    in Contemporary Society. George S. Smith, Phyllis Messenger, and Hilary A.
    Soderland ed. Pp. 55-62.

Relph, Edward
  1976 Place and Placelessness. London: Pion.

Renfrew, Colin
  2000 Loot, Legitimacy and Ownership. London: Duckworth.

Sahli, Mondher and Jean-Jacques Nowak
  2007 Does Inbound Tourism Benefit Developing Countries? A Trade Theoretic
    Approach. Jounral of Travel Research 45:426-434.

Sun, Kerya Chau
  2006 Angkor Sites, Cultural World Heritage *In* Art and Cultural Heritage: Law, Policy,
    and Practice. Barbara T. Hoffman ed. Pp. 148-156. New York: Cambridge University
    Press.
Timothy, Dallen J. and Gyan P. Nyaupane
  2009 Cultural Heritage and Tourism in the Developing World: A Regional Perspective.
    New York: Routledge.

Timothy, Dallen J. and Stephen W. Boyd
  2003 Heritage Tourism. England: Pearson Education Limited.

UNEP
  n.d.a Negative Socio-Cultural Impact from Tourism: Change or Loss of Indigenous
Identity and Values. Electronic document
,http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/FactsandFi
guresaboutTourism/ImpactsofTourism/Socio-CulturalImpacts/NegativeSocio-
CulturalImpactsFromTourism/tabid/78781/Default.aspx, accessed 3/16/13.

  n.d.b Tourism and Socio-Cultural Conservation. Electronic document,
http://www.unep.org/resourceefficiency/Business/SectoralActivities/Tourism/FactsandFi

guresaboutTourism/ImpactsofTourism/Socio-CulturalImpacts/TourismandSocio-
CulturalConservation/tabid/78782/Default.aspx, accessed 3/16/13.

UNESCO
  a Angkor. Electronic document, http://whc.unesco.org/en/list/668, accessed March 22,
  2013.

  b Convention Concerning the Protection of the World Culture and Natural Heritage.
  Electronic document, http://whc.unesco.org/en/conventiontext/, accessed January 29,
   2013.

  c The Criteria for Selection. Electronic document, http://whc.unesco.org/en/criteria/,
  accessed February 13, 2013.

  d Frequently Asked Questions. Electronic document,
  http://whc.unesco.org/en/108#nomination, accessed February 24, 2013.

  e The World Heritage Convention. Electronic document,
   http://whc.unesco.org/en/convention/, accessed February 14, 2013.

  f World Heritage in Danger. Electronic document, http://whc.unesco.org/en/158/,
  accessed March 22, 2013.

  g World Heritage List. Electronic document, http://whc.unesco.org/en/list/, accessed
  February13, 2013.

  h World Heritage List Nominations. Electronic document,
  http://whc.unesco.org/en/nominations/, accessed February 13, 2013.

  i Text of the Convention for the Safeguarding of Intangible Cultural Heritage.
  Electronic document, http://www.unesco.org/culture/ich/en/convention/, accessed
  February 14, 2013.

Wanderlust
 2011 New Machu Picchu Regulations. Electronic document,
  http://www.wanderlust.co.uk/magazine/news/new-machu-picchu-regulations, accessed
  February 25, 2013

World Tourism Organization
 2012 Annual Report 2011.

Figure 1

Source: Charsonesos, Ukraine. Ruins of Basilica (Global Heritage).