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I. Introduction:

The subject of this paper is an archaeological site in northern Jordan that has a potentially great cultural value, but the substance and integrity of which is under threat partly through bad excavation practices and lack of a sustainable management concept. The site in question, ‘Abila’ (now Qweilibeh), is one of Jordan’s lesser-known archaeological treasures (see Maps I-III); although it was probably a member of the famous Decapolis league of cities, the site has been shunted off the archaeological stage by other larger, more developed and prominent Decapolis sites (see Map II) such as Gerasa (Jerash) or Gadara (Umm Qays). Abila has witnessed only limited excavations to date, but these in themselves are in danger of jeopardising any future plans to sustainably develop the site, both for tourists and for the local inhabitants.

The following will attempt to assess the threats to the site from an archaeological perspective. A first section will give a brief historical and geographical introduction to the site, outlining the main features of its cultural significance. Subsequently, the current situation of the site will be assessed, making reference to the methodology and reconstruction/conservation practices employed by excavation teams who have been regularly working at the site. This is based mainly on the authors' own observations during a field trip to Abila in Spring 2005 and will also address matters relating to the management of the site. This topic is carried on into the third section of the paper, which will discuss the site in the light of international charters and guidelines concerning good practice as regards the conservation of archaeological heritage. The authors will attempt to provide not only a critical evaluation of the site, but also to suggest methods of improving archaeological practices there, so that a sustainable development of the site can ensue.
I.I. Introduction to Abila

As mentioned above, Abila is located in the fertile hilly region of northern Jordan, lying approximately three miles south of the Yarmouk River (which currently denotes the state border between Jordan and Syria) and twelve miles from Gadara (Umm Qays). Its name can be traced to the Hebrew word ‘Abel’, meaning ‘perennial stream’, or ‘watercourse’ which could be reason for settlement there (a stream runs through the site, which joins up with the Yarmouk River, flowing eventually into the Jordan River) (Abila Archaeological Project online 2003: References). Abila is thought to have been continuously settled from at least the Middle Bronze Age (2100-1550 BC) (Ball 2001: 197). Excavations have proven that the first inhabitants even settled here as early as the Neolithic Age (8000-4000 BC). The ancient wall to the city is believed to have been constructed in the Iron Age, and other ‘uncovered ruins’ point to inhabitation throughout the Greco-Roman ages, to the Byzantine and Islamic periods and further, although these last three periods have been the main focus of work for archaeological teams (Abila Archaeological Project online 2003: Discovery). The site itself comprises two hills (‘Tell’s’), the northern one called Tell Abila, the southern one being known as Khirbet Umm el ‘Amad (in Arabic “Mother of the Columns”). These are separated by a low-lying saddle area. To the East of these two Tell’s runs the Wadi (Valley) Qweiqibeh, where extensive remains of tombs and burial complexes have been found. These are adorned with exquisite wall paintings, and as such, could be one of the main treasures of Abila. Further structures that have been identified include five Christian churches, a Byzantine shrine, an Islamic fortified palace, a Roman villa, an ancient olive press and an impressive system of underground water channels, which transported water to the centre of the city and to its Roman bath and nymphaeum (Mare 2004).
I.II. Cultural significance of the site

Abila’s heyday can be said to have reached its peak during the Greco-Roman age, when it was one of a number of prominent and wealthy cities in the region of northern Jordan and Syria that were collectively known as the Decapolis (literally ‘ten cities’). The term ‘Decapolis’ is somewhat vague, but it is thought to have been a loosely bound alliance of former Macedonian cities, which came under indirect Roman rule between 1 BC and 1 AD. The term is perhaps better used to denote an economic and administrative link between a number of cities sharing the similar geographical border region between Jordan, Israel, and Syria, and roughly stretching from Amman in the South to Damascus in the North. As the name suggests, this administrative federation originally started out as just ten cities, but gradually grew in size until it included around 15 sites, although there are conflicting reports as to their exact number. These urban settlements were strategically placed along main trading routes and near valuable supplies of water and as a result became reasonably wealthy. Although these cities were officially under Roman rule, they cannot be said to be overwhelmingly Greco-Roman. According to Warwick Ball, for example, their administration was occasionally transferred between Roman, Judaean and Nabataean rule. The cities were also multicultural, their population being a mixture of (predominantly) Arabs, Greeks, Macedonians, and Jews. Old Semitic names for cities were often either kept or reused after the end of the Roman rule, and temples and cults to local Semitic deities were also erected (Ball 2001: 181).

Abila was probably one of the ten original Decapolis cities (Scheck 1985: 40) and according to research, it already included many customary features of such a city as far back as 2 AD, although it was in no means as highly developed as sites like Jerash or Damascus. Population estimations for Abila during the Roman period have been placed at between 8000-10,000. The economy was apparently well sustained due to the city’s fertile agricultural hinterland, which created enough wealth to buy in luxury goods (Ball 2001: 197).
Three specific references to the Decapolis can be found in the Bible, highlighting the significance of these towns, although no direct reference is made to Abila itself:

"Large crowds from Galilee, the Decapolis, Jerusalem, Judea and the region across the Jordan followed him." (Matthew 4:25)

"So the man went away and began to tell in the Decapolis how much Jesus had done for him. And all the people were amazed." (Mark 5:20)

"Then Jesus left the vicinity of Tyre and went through Sidon, down to the Sea of Galilee and into the region of the Decapolis." (Mark 7:31)

(Abilan Archaeological Project online 2003: References)

I.III. Abila today

Today the archaeological site is uninhabited. The reasons for its current decline are unclear, but the city appears to have never fully recovered after an earthquake destroyed it in AD 749. The inhabitants moved to other areas, and although the city was briefly re-inhabited between 969-1171 (Fatimid period), it never again rose to the status it had enjoyed as a Decapolis city (Afanasyeva 2004: 70). At present, the site is only used on a temporary basis – by the excavation teams who come for a couple of months within the year, and by Bedouin tribes, who migrate to the cooler northern climes in the spring, in order to escape the withering heat of a southern Jordanian summer. The Bedouins camp on the land and use the fertile pastures for their cattle. Other land surrounding the site is for the most part under private ownership. Local farmers mainly use this for agricultural purposes (Afanasyeva 2004: 71).

This section has provided a general overview to the site of Abila, but has not touched on archaeological aspects of the site in too great detail. Matters pertaining to excavations, methods of reconstruction and interpretation at the site will be highlighted in the following.
II. The archaeology of Abila:

II.I. Excavations: evidence and problems

Abila has been the object of archaeological research for almost 200 years now. Ulrich Seetzen, who also ‘discovered’ Jerash, found the city of Abila in ruins when he travelled there in 1806. In 1888 another German found his way to the site, Gottlieb Schumacher worked for the German Society for the Exploration of Palestine and made detailed plans and sketches of the site, which were published in 1889 in a book entitled “Abila of the Decapolis”. The first extensive archaeological examination of the site of Abila was undertaken by the American Dr. Harold Mare in 1979. Dr. Mare was professor of New Testament Studies at the Covenant Theological Seminary in St. Louis, Missouri. His research indicated that the site dates back to the Neolithic Period (8000-4000 BC) but the main focus of his investigations up to his death in 2004 lay in the Greco-Roman, Byzantine and Islamic periods. Dr. Mare and his team excavated at Abila for over 20 years, spending approximately seven weeks at the site every two years (Abila Archaeological Project 2003: Excavations at Abila of the Decapolis). Due to their efforts some invaluable artefacts have been discovered and the Department of Antiquities in Jordan could be convinced of the importance of Abila with the result that they actively participated in the excavation process.

Even though the team of Dr. Mare has contributed to the understanding of Abila, their practices of excavation have caused reasons for concern. Not only do they seem to lack professionalism in the way they deal with archaeological artefacts, but they also display ignorance of the international standards for conservation and reconstruction\(^1\) (see Figure I for examples). Furthermore, it is not evident what efforts are being made as regards the sustainable management of the site between excavation periods. Some of the problems associated with the excavations undertaken so far will be discussed in the following.

\(^1\) See the 1956 UNESCO Recommendations on International Principles Applicable to Archaeological Excavations. Available at: http://www.unesco.org/general/eng/legal/citizenheritage/delhi56.html.
Various excavations have taken place at the site of Abila since Dr. Mare first came there in 1979. Evidence of many of these excavations can still be seen at the site today, and for the most part can unfortunately only be viewed under a negative light. Excavation trenches, for example, are often not refilled once the excavation period is over, leaving the archaeological remains exposed, thus speeding up their deterioration. Open and sometimes deep trenches are also a serious health and safety hazard. Excavations seem to have taken place mainly in areas where Christian archaeological remains were expected, biasing the results of the excavation periods. Apparently three Byzantine basilicas have been excavated so far; other important areas of the site of equal importance (e.g. the Roman plaza/theatre in Area B) have been neglected. Excavated material remains that have not been used in reconstruction seem to be of minor interest to the excavation team, since they are scattered all over the site (see Figure IV), without protection or apparent numbering.

A proper excavation by a professional team should not leave a site in such a state as one finds at Abila today. As a foreign team one has special responsibilities to treat another country’s cultural heritage with respect and should therefore always try to work to a high standard. The role of the Department of Antiquities in Jordan in the protection and development of Abila is also questionable. A review of the excavation regulations and antiquities laws might be useful in order to prevent other sites in the future from suffering a fate similar to Abila.

\[2\] It remains uncertain whether the Roman theatre and other ‘non-Christian’ areas of the site would have received more ‘attention’ during future excavations if Dr. Mare had not died. Updates to the website have also not occurred since his death, therefore the authors do not know whether the team went to Abila as intended in 2004, and if so, what additional work they actually carried out there.
II.II. Reconstruction and related problems

The reconstruction of monuments and walls at Abila has to be reviewed critically as there does not appear to be a sustainable concept for ongoing reconstruction work. There is not only a problem with the selection of reconstructed features, but the reconstruction work itself shows signs of neglect and unprofessional methods. The use of inadequate materials is a major source of concern, as is the choice of fragments, especially in columns that have been reassembled. These and related problems regarding the reconstruction methods at Abila are discussed in the following.

The first impression of Abila from a distance is that of a coherent site of moderate size with some reconstructed features, especially rows of columns. As one comes closer to the site though, it can be noted that the reconstruction methodology used here is inadequate and diminishes more than just the optical value of the site. It can be noted that parts of columns were put together that do not fit stylistically (see Figure III). It almost looks as if they were put together randomly, without regards to their original position and combination. But the bad reconstruction does not end here. Material binders such as concrete and silicon were used for reassembly. Both materials should not be found at a reconstruction site (see Figure I). They are not only irreversible (or difficult to reverse) but also very damaging to the stone and unsightly to the eye. They are also neither original materials nor close to copying any materials that would have been used in ancient times as binders. A disregard of the archaeological material of the site is evident. One instance shows a stone coffin that has apparently been used for concrete mixing in recent times (see Figure II). Walls and columns are built up without care and show large sections of concrete and other foreign materials. In some cases smaller stones have been inserted into the concrete or silicon to close a gap.

Another problem apparent in the reconstruction is the bias towards Christian remains and the reassembly of parts of the Byzantine basilica. Other areas of the site have not received such intense attention and many
fragments and finds lie scattered around the area. These are particularly prone to weathering and easy to loot, as there is hardly any security on the site. As these fragments do not appear to have been recorded (lack of numbering), their archaeological value has been diminished to being almost worthless for scientific investigations. The general disorder of objects without an apparent use also adds to the confusion about the interpretation of the site. The tomb area of Abila seems to have suffered extreme damage due to lack of proper conservation/consolidation, maintenance and protective measures.

As it appears, inadequate documentation of the excavation seasons is being published, which further accentuates the overall impression of bad practice concerning the research being undertaken at Abila. It is not clear if any consultation with external and or local experts has taken place in preparation for or during the excavations. The degree of involvement by Jordanian archaeologists and conservators has to be established as well, as this might help in developing a better and more sustainable approach to reconstruction in Abila. At the time of research, the site appeared incoherent and difficult to interpret due to the methods of reconstruction used and the selection of features to be reconstructed.

II.III. Interpretation and related problems

To develop Abila as a tourist attraction and to make it valuable for other scholars and interested lay persons calls for the development of a comprehensive concept dealing with the interpretation of the site. This seems to be completely lacking at the moment.

As one wanders around the site of Abila it is difficult to detect a coherent concept of reconstruction, thus making it extremely hard to piece together the story of Abila, especially for the layman. It is apparent though that the main emphasis of reconstruction has been placed on Christian Byzantine remains, thus presenting a very limited and biased image of this complex site,
which witnessed a long history of occupation before its downfall. Roman and Greek remains mostly seem to be neglected.

The reconstruction method in itself creates a problem of interpretation as regards the authenticity of the monuments. Due to the extensive use of concrete and silicon as well as other materials in the reconstruction, the integrity of the reconstructed sections has been lost, resulting in the demise of the cultural and archaeological value of the remains and the site as a whole. The assembling of blocks that obviously do not belong together furthers this impression even more.

An important tool in the interpretation of sites is the publication of excavation reports and related documents. Many excavation reports seem to have been published by Dr. Mare in the “Annual of the Department of Antiquities of Jordan”. The usefulness and quality of these publications has to be investigated. Unfortunately this annual publication is difficult to come by from outside Jordan.

II.IV. Security issues

All archaeological sites need to be protected against vandalism, looting and irresponsible use of ancient artefacts in order to be secured for the future. But not only the artefacts need protection, the visitors of and workers at the site have the right to be protected against dangerous traps. It is the responsibility of the excavation team, the Department of Antiquities in Jordan and any other organisation that is involved in the development of Abila to make sure that sufficient security measures are put in place.

Security issues are a major problem for the management of Abila, as the site is virtually abandoned for most of the year apart from irregular and very limited visits by one security officer. The Department of Antiquities in Jordan seems to have appointed one person to be responsible for the site of Abila,
but the regularity of his visits and inspections is unknown. The absence of clear site boundaries and the lack of fences is a further hindrance in the establishment of an effective control and security scheme.

The main problem caused by this lack of security is the fact that looting becomes easy and is therefore practiced to a large degree by the local population. On some occasions vandalism also seems to take place at the site. The tombs appear to be especially prone to such damage and should receive particular attention in the establishment of security measures.

Another safety hazard at the site are the already mentioned open trenches and excavation pits, the scattered artefacts and the unprofessional and inadequate fences within the site.

In summary it can be said that the site is not only dangerous for potential visitors, but that the archaeological remains are also under danger of being destroyed by weathering, looting and vandalism. This calls for urgent measures to improve security at the site of Abila.

III. Standards applicable to the sustainable use and interpretation of Abila:

III.I. Excavation

The previous sections of this essay have been devoted to the critical analysis of problems associated with the excavation and reconstruction processes that have taken place in the past at Abila. The aim of this section is to go beyond this analysis and to suggest methods of sustainable use and interpretation of the site at Abila, by referring to international charters and declarations relevant to this topic.

As archaeological sites are very fragile and prone to destruction through excavations, the main question one has to consider is whether any excavation is necessary in the first place, or if other investigative methods, such as remote sensing, could produce the desired information. According to
Article 5 of the 1990 ICOMOS Charter for the Protection and Management of the Archaeological Heritage:

“Archaeological knowledge is based principally on the scientific investigation of the archaeological heritage. Such investigation embraces the whole range of methods from non-destructive techniques through sampling to total excavation.”

However, it goes on to say that:

“As excavation always implies the necessity of making a selection of evidence to be documented and preserved at the cost of losing other information and possibly even the total destruction of the monument, a decision to excavate should only be taken after thorough consideration.”

This decision should therefore only be made if a comprehensive plan for the documentation and preservation of the site is in existence before excavations begin to ensure the site’s integrity is in no way violated. Part of the excavation process should include adapting these plans, as new evidence is uncovered. In the case of Abila, it is also apparent that Dr. Mare and his team have chosen to concentrate their efforts on displaying evidence of Byzantine remains. This is in accordance with the above-mentioned Article. However, the authors agree with the recommendation of the Australia ICOMOS Burra Charter 1999, Article 15.4, which states that:

“The contributions of all aspects of cultural significance of a place should be respected. If a place includes fabric, uses, associations or meanings of different periods…emphasising or interpreting one period or aspect at the expense of another can only be justified when what is ...removed...is of slight cultural significance and that which is emphasised or interpreted is of much greater cultural significance.”
Bearing this in mind, it could be argued that the significance of other areas of the site (e.g. from a historical point of view) is such that it would be preferable for them to be included in the overall representation and preservation concept, instead of being marginalized into neglect, as is currently the case. Returning to the ICOMOS 1990 Charter, Article 5 further stipulates that a portion of the excavation should be left undisturbed, thus providing an environment for researchers to carry out future investigations. The authors by no means assume knowledge of all unexcavated areas of the site, but it appears that the USA team has carried out ‘experimental’ excavations in nearly every corner of the site, to see if anything they consider valuable (i.e. Byzantine remains) can be uncovered. Once disproved, these ‘excavations’ were often subsequently left open to the elements, and the extent of their documentation remains unclear.

Improper post-excavation procedures like the above-mentioned are not only irresponsible in regards to the safety of potential visitors to the site and workers at the site, but they are also in contradiction with Paragraph VI. of the 1931 Athens Charter which states:

“...[T]he principle that the archaeological heritage should not be exposed by excavation or left exposed after excavation if provision for its proper maintenance and management after excavation cannot be guaranteed.”

The Jordanian Antiquities Law from 1988 does not specifically stipulate how excavations should be carried out, but only makes mention of general
guidelines on how to obtain an excavation permit. It does refer to excavation instructions issued by the Department of Antiquities of Jordan; however, the authors were unable to obtain these. Therefore it remains unclear as to the practical measures involved in the monitoring and regulation of excavations within the Hashemite Kingdom of Jordan.

III.II. Reconstruction, preservation, conservation, consolidation

Article 3 of the 1999 Burra Charter defines conservation as being “based on a respect for the existing fabric” and that any measures taken regarding the conservation of a building or site should involve the least possible intervention. Reconstruction practices at Abila, however, do not appear to respect the fabric of the site, the consequence of which has caused the site to greatly depreciate in terms of authenticity and archaeological value.

To effectively maintain a site for the future, a long-term conservation plan has to be developed and implemented in a sensitive and sustainable manner. Yet it is not evident that such a plan even exists for Abila, due to the numerous examples of insensitive use of foreign materials in reconstruction, for example. Article 8 of the 1999 Burra Charter clearly stipulates that:

“Conservation requires the retention of an appropriate visual setting and other relationships that contribute to the cultural significance of the place. New construction, demolition, intrusions or other changes which would adversely affect the setting or relationships are not appropriate.”

Furthermore, the extensive use of concrete and silicon at Abila goes against one of the main principles of conservation, namely that all reconstruction and conservation should be reversible (see the 1999 Burra Charter, Article 15.2). Although the policy of ‘reversibility’ is very difficult to carry out in practice, because all manners of intervention will leave some kind
of trace (albeit at the microscopic level), it would nevertheless have been possible at Abila to use binding materials that respected the original fabric, and were less harmful, both to the archaeological material and the eye of the viewer. Article 4 of the Burra Charter includes the option to use modern materials and techniques in favour of traditional ones, but only in exceptional cases and if used based on scientific evidence and previous experience. Article 20.2 of the same Charter goes on to say that any “reconstruction should be identifiable on close inspection” as being new work. In Abila, new work is easily identifiable, but not just on close inspection, and it has been carried out in such a way that the observer can’t appreciate the original material. Not only have the archaeological teams working at the site used inappropriate materials in their reconstructions, they have also reassembled architectural components that obviously did not originally belong together. This contradicts Article 19 of the Burra Charter, which states that reconstruction should only be carried out “where there is sufficient evidence to reproduce an earlier state of the fabric”.

A viable alternative to reconstruction is consolidation, which should physically protect the cultural significance of the original material, and should go hand in hand with an active maintenance programme, in order to retain this significance. As the archaeological teams at Abila work with the Department of Antiquities of Jordan, they should have been required to guard and maintain the site from the outset of their research there. The Department of Antiquities for their part, should be supervising the work of these foreign teams, to ensure that consolidation and maintenance is carried out in favour of insensitive reconstruction, and that any reconstruction measures are met in a manner which respects the authenticity and integrity of the original fabric.

Maintenance of a site is an ongoing and never-ending process, and should certainly not terminate once the season’s work is finished. However, a further threat to the archaeological fabric at Abila occurs during the periods
where no research is being carried out - the site is left abandoned and exposed. This particularly affects the numerous artefacts that are left scattered over the site, due to the absence of a storage place or proper museum, which could be used to house and/or display finds and architectural elements. At present, these are exposed to the elements, and can also be easily removed by local inhabitants. This goes against Article 6 of the 1990 ICOMOS Charter for the Protection and Management of the Archaeological Heritage, as quoted above.

### III.III. Interpretation of the site

Decisions regarding the presentation and interpretation of a site for the public should be made alongside those regarding conservation and reconstruction. According to Article 7 of the above-mentioned Charter, interpretation can be seen as an important aide in raising awareness of the history and cultural significance of a site, and thus the need for its protection. According to Article 13 of the 2002 Draft ENAME Charter: “The goal of presentation is to show the range of meanings and stories present within a site.” At Abila it is obvious, however, that the archaeological teams have chosen to portray Byzantine Christian remains in favour of other periods in history.

Interpretation techniques can also be used as a less-intrusive way of portraying information than methods employing reconstruction, for example. Article 9 of the ENAME Charter promotes these interpretation techniques, listing artist’s drawings, plans and computer-generated models as examples that may provide a clearer explanation of the original form and function of a monument. Such methods could be introduced as a viable alternative to reconstruction at Abila, because anastylosis is not possible due to the lack of relevant documentation and most of the architectural remains of the site are neither in danger of collapse, nor available in sufficient quantities to enable a coherent reassembly of elements for a particular monument. Visitors to Abila
are currently\(^3\) not presented with any kind of interpretation concept, not even a simple plaque displaying the site’s name, let alone the names of any of the monuments.

### III.IV. Security issues

As mentioned in section III.II, the architectural components scattered around the site at Abila are not only exposed to the elements, but can also be easily removed by local inhabitants. This is an issue of security, which applies not only to these random architectural elements, but also to the site as a whole. Currently, the Department of Antiquities of Jordan is the body responsible for ensuring the maintenance and safeguarding of the archaeological heritage at Abila. However, as L.A. Fakhoury quite rightly points out in her essay “The Cultural Heritage Legislation in Jordan” (N.d.), “…extreme centralization in the field of cultural heritage conservation…is now seen as an obstacle in the way [of safeguarding the heritage]”. She goes on to explain that the state cannot cope with the financial burden required to support the estimated 100,000 sites and monuments across the country, and advocates that partnerships between the public/private sector, and involving local communities should be encouraged, the results of which would be “justified not only culturally, but economically and socially”.

According to M. Shunnaq (Afanasyeva 2004: 108ff\(^4\)), research indicates that the majority of individuals who regularly carried out looting at Abila lived in the vicinity of the site. To this end, awareness-raising programmes directed at the inhabitants of Abila and the immediately surrounding area should be implemented to give them a greater understanding of the significance of the site, and to develop initiatives, which would be more financially appealing to the local population than current activities, which take advantage of the site

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\(^3\) At the time of the Authors’ visit, Spring 2005.

\(^4\) Originally quoted in: M. Shunnaq. The Archaeological Site of Abila: Between Local Community and Public Awareness. Date and publisher unknown.
for personal gain. The same research indicates an overwhelming willingness on the part of the looters to discontinue such activities if they were offered similar work on legal grounds that were also financially viable. The majority of the looters, however, also admitted that they would probably stop looting if the police and the Department of Antiquities more strictly enforced the security at the site.

Given the extensive size of the site, the first step in this direction would be to clearly define the site’s boundaries and to delineate them by means of adequate fencing, for example. A further step should involve the employment of at least one permanent guard to regularly patrol the site. As previously mentioned, a storage facility for artefacts and architectural remains, either on or near the site, would not only make looting difficult, but also protect the archaeological heritage from the negative effects of weathering. In addition to the storage facility, a museum and visitor centre could be established, either on or next to the site, or within the village, depending on availability of land and building regulations. A museum would not only provide a secure environment for the archaeological finds, but would also function as a further means of promoting and interpreting the site. Both facilities would be an ideal opportunity to involve the local community, which in turn would improve the local economy.

III.V. Tourism possibilities

Abila as it stands today is not an obvious choice for promotion as a tourist attraction. Lack of facilities and interpretation of the site, coupled with unprofessional reconstruction of the architectural elements render the site unsuitable to be opened up for tourism at present. Ease of access and tighter security are two further issues that would have to be tackled if Abila were to become a viable tourist destination.

Once these fundamental aspects have been addressed, the site’s tourist promotion could rest upon the tomb area, and upon the ancient town as an ‘in situ’ example of domestic life in a Decapolis city. This would differ from other similar and larger sites, which concentrate on displaying the
remains of Roman civic and religious life. However, tourist activity in sensitive areas of the site, such as the tombs, could be harmful to the archaeological evidence if not managed properly. Therefore, an environmental impact assessment would have to be undertaken, which, together with a comprehensive management plan addressing visitor carrying capacity, could ensure that minimum damage occurs to the fragile condition of the site and the tombs in particular.

One of the main obstacles facing many of Jordan’s archaeological sites concerns funding to ensure the ongoing maintenance and protection of the site. This in part is due to the fact that a large proportion of money generated through entrance fees goes straight back to the state and is not reinvested in the sites themselves. Leen A. Fakhoury illustrates this in her paper:

“In 1998, JD [Jordanian Dinar] 1.95 million was allocated to the DOA [Department of Antiquities] for expenditure on projects for site conservation and presentation. However, if we consider that approximately 90% of the tourism income is generated from cultural tourism (i.e. around JD 690 million of the JD 770 million in 1996), the result is that less than 0.3% of the income generated by the sites goes back to them.”

Fakhoury suggests that a higher percent from entrance fees (25%) be allocated to the Department of Antiquities in the future, for them to spend on “conservation, restoration, presentation, promotion and monitoring”. If money thus generated were proportionately distributed to the various archaeological sites throughout the country, this could provide Abila with the vital cash injection it needs to start setting up a conservation and management plan.

One advantage in there being no tourism concept as yet for Abila, means that plans could be made for it to be developed in a sustainable way, involving the local community where possible. This would benefit the local community from a socio-economic
perspective, and could also make Abila an example of ‘good practice’ for other similar sites yet to be developed for tourism.

IV. Conclusion:

In an ideal world, the above-mentioned suggestions would spell out a brighter future for Abila. However, the authors question how they could realistically have a positive impact on the site of Abila at the present time, for the extent of bad archaeological practice and lack of management at the site has almost reached the stage where damage incurred will become irreversible. Bearing this in mind, it may be foolhardy to try and further develop the site for tourism, which apart from being exceedingly costly would not necessarily hinder the process of deterioration to the archaeological material. Before Abila could even start to be developed for tourism, an ongoing conservation and management plan for the site would have to be implemented, in order to protect its archaeological value.

A subsequent point for consideration involves the community living around the site, and the impacts such a development would have upon them. Better management and tighter security for the site could ensure that illegal looting is curtailed, but would probably also imply stricter regulations concerning land-use, which may not be in the interests of the local inhabitants. It would therefore have to be ensured that the local population actually benefited from any archaeological and/or tourism activities. For a development plan to be sustainable, it should also take into consideration the views of these local residents, for example whether they are at all interested in the preservation of the site, and if so, how they would like to see it used or developed.

Would it therefore even make sense to promote Abila for tourism purposes, in a country that already has numerous better-known and more developed examples of a Decapolis city? At present, Abila appears to be more of a training site, or test ground for foreign university archaeologists to try their hand at excavation in a country where they are not bound by strict regulations.
Since there are so many problems still to be resolved before any further steps should be undertaken, Abila does not appear to be an ideal site to be opened up for tourism at present. From an archaeological perspective, the authors therefore advise that initial protective measures are implemented to safeguard the archaeological material, otherwise that the site be left ‘as is’ (i.e. undeveloped), until a comprehensive management plan can be drawn up and executed.
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Map sourced from: Lonely Planet online (N.d.).
Available at: http://www.lonelyplanet.com/worldguide/destinations/middle-east/jordan
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Map sourced from: Afanasyeva (2004: 72)
Figures: Examples of bad practice by the archaeological team.

All photograph credits belong to the authors.

**Figure I:**

Poor quality of reconstruction using foreign materials.

An ill-fitting piece of basalt and silicon used to fill a gap in a column

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Pieces of a marble cladding that have been left exposed to the elements in a pile of rubble
More attention devoted to Christian remains than to secular ones.

**Figure III.**

Reassembly of column fragments from a Byzantine church that obviously do not belong together

Partial excavation of a possible Roman amphitheatre

**Figure IV.**

Archaeological remains left randomly scattered over the site.

Fragments of columns and capitals left haphazardly without evidence of documentation and exposed to the elements
Archaeological Definitions:

**Protection** is understood in legal terms as the action required to provide the conditions for a monument, site or historic area to survive...Legal protection, which is based on legislation and planning norms, aims to guarantee defence against any harmful treatment, provide guidelines for proper action, and institute corresponding punitive areas (Feilden 1998: 61).

**Preservation** aims to take the measures necessary to keep the site in its existing state...Preservation measures include regular inspections and cyclical and routine maintenance. It implies that repairs must be carried out as required to ensure resource integrity. In practice, this means that damage and deterioration...must be arrested and reversed when discovered (Feilden 1998: 61).

**Maintenance** means the continuous protective care of the fabric and setting of a place, and is to be distinguished from repair. Repair involves restoration or reconstruction (Australia ICOMOS Burra Charter 1999 (BC) – Art. 1.5)

**Conservation** implies keeping in safety or preserving the existing state of a heritage resource from destruction or change...The general concept of conservation implies various types of treatments aimed at safeguarding buildings, sites or historic towns; these include maintenance, repair, consolidation, reinforcement...the primary aim of conservation is to preserve the authenticity and integrity of the cultural resource (Feilden 1998: 61).

**Consolidation** is the physical addition or application of adhesive or supportive materials to the actual fabric of the cultural property in order to ensure its continued durability or structural integrity (Feilden 1998: 62).
**Restoration:** Its aim is to preserve and reveal the aesthetic and historic value of the monument and is based on respect for original material and authentic documents. It must stop at the point where conjecture begins...The restoration in any case must be preceded and followed by an archaeological study of the monument (Venice Charter, Articles 9-12).

**Reconstruction** means returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric (BC – Art. 1.8). Reconstruction must be based on accurate archaeological and architectural documentation and evidence, never on conjecture (Feilden 1998: 63).

**Anastylosis:** Only...the reassembling of existing but dismembered parts can be permitted. The material for integration should always be recognizable and its use should be the least that will ensure the conservation of a monument and the reinstatement of its form (Venice Charter, Article 15).

**Interpretation** means all the ways of presenting the cultural significance of a place. [Interpretation may be a combination of the treatment of the fabric (e.g. maintenance, restoration, [and/or] reconstruction), the use of and activities at the place, and the use of introduced explanatory material] (BC – Art. 1.17).

**Cultural significance** means aesthetic, historic, scientific, social or spiritual value for past, present or future generations. Cultural significance is embodied in the place itself, its fabric, setting, use, associations [and] meanings...Places may have a range of values for different individuals or groups (BC – Art. 1.2).

**Fabric** means all the physical material of the place including components, fixtures, contents, and objects (BC – Art. 1.3).
Use means the functions of a place, as well as the activities and practices that may occur at the place (BC – Art. 1.10).
Reconstruction and tourism planning in the Decapolis region
(by Nigel Downes and Ahmet Sezgin)
PREFACE

This paper is intended to serve as an overview of the issues related with the promotion and development of tourism concepts for the Decapolis region of Northern Jordan, a region of outstanding cultural and archaeological significance that thrived in both early and late antiquity throughout the Roman, Byzantine and Umayyad periods and was occupied almost continuously for 10,000 years. The region exhibits high tourism development potential but where development has traditionally been rapid because of economic concerns and focused on ambitious tourism projects that prompted haphazard restoration activities. The evaluation of cultural and archaeological resources, and facilities or infrastructure established in the region affirms this fact. Considering these facts, our study was expected to shed light on the future prospects for Abila. We opted to have a holistic view of the Decapolis region, to which Abila is an integral part, due to their common archaeology values, and their common promising tourism potential.

With regards to observations and impressions acquired during fieldwork undertaken in February 2005 and well as extensive literature reviews, we attempt to provide a summary of: a) the past and the potential future reconstruction measures, that constitute the prevalent presentation and restoration approach of Decapolis sites and; b) the planning and site development considerations for the promotion of tourism development in the region.

The historical and potential development of tourism in Jordan and its understandable intertwining with the country’s archaeological, cultural and environmental resources are dealt with in the initial introductory pages of this paper. The second chapter deals with the varying approaches to reconstruction, while third chapter deals with reconstruction practices in general and in special regard to the Decapolis cities. The paper then lastly highlights the responsibilities in relation to the concept of sustainable tourism.
development and summarizes the tools for sustainability analysis of potential tourism developments; identifying carrying capacities, priorities, and values to be preserved and setting careful management aims for sustainable management of sites and to promote sustainable tourism. To aid the development of the regional tourism potential, it is concluded that there needs to be efficient communication and the strengthening of links between the local population, the Jordanian tourism board, the Department of Antiquities, local authorities and Governmental agencies, to ensure sustainable tourism development transpires.
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1. Setting the Scene: Tourism & Archaeology in Jordan

1.1. Introduction

Emerging out of the post-World War I division of the Middle East by the United Kingdom and France, the Hashemite Kingdom of Jordan is a small country in a region of intense political strife. Situated at the junction of the Levantine and Arabian regions of the Middle East, the kingdom is bordered on the North by Syria, to the East by Iraq, and by Saudi Arabia to the East and South. To the West are the occupied West Bank territories and Israel, while Jordan's outlet to the Red Sea, the Gulf of Aqaba, is to the south (please see Figure below). Jordan exhibits a diverse natural exquisiteness and rich cultural heritage, a varied ecosystem, assorted geographic terrains, as well as abundant historical sites, with over a hundred thousand registered archaeological sites (Ham & Greenway, 2003).

Jordan, one of only two Arab lands to have declared peace with Israel, has for years played a fundamental role in the struggle for power in the Middle

Figure 1 Map of Jordan. Source: adapted from Simons & Finlay (1997).
East. This significance is a consequence partially from its strategic location at the crossroads of what most Christians, Jews and Muslims call the Holy Land. However economically, limited resources, rapid population growth and regional instabilities have crippled Jordan. Only an estimated seven percent of the country’s land area is arable (Simonis & Finlay, 1997). Water resources are in extremely short supply, even by Middle Eastern standards (Barham, 1998). In addition, unlike many of its regional neighbours, Jordan has no oil of its own, and resources are limited to phosphates and agricultural produce. Consequently the economy depends essentially on services, tourism and foreign aid, for which the United States and Western Europe are the chief donors (Hazbun, 2004).

With a population of 4.5 million people, Jordan’s gross domestic product amounts to $7.8 billion dollars annually (Kelly, 1998). Unemployment rates differ in the literature; however, some estimates place the figure at least 22 percent and may be as high as 27 percent (Kelly, 1998; Barham, 1998). Poverty rates have also grown dramatically, from an estimated three percent in 1986 to approximately twenty-five percent today (Tell, 1998). Worsening inequality and a perception that a selected few retain the benefits of economic growth complicates efforts to bring about lasting economic transformation. A failure to spread the benefits of future economic growth more widely will unduly make future efforts to expand and sustain reform even more problematic.

Peace with Israel, in particular, has produced a spark for popular discontent; and to some extent, the international monetary fund (IMF), World Bank-sponsored structural adjustment, and other reform programs have been criticised (Henderson, 1999). Sharaiha and Collins (2001) mention, that despite significant advance with economic reform polices in the past decades, economic performance has been disappointing and economic growth has not kept pace with the combined rapid growth of the population and refugee camps. An important reason for this has been the difficult external environment. Jordan has had to simultaneously contend both with
poor access to markets, which have relentlessly handicapped exports and investments to the West Bank and Israeli markets, and with the political and economic situation in Iraq, which would normally be Jordan's largest export market.

Nevertheless, the development of tourism in Jordan has played fundamental role in economic prosperity. In 2003, it was the largest private sector employer, directly employing 22,110 in hotels and travel agencies and indirectly providing thousands of employment opportunities in tourism-related sectors. These include construction, transportation, retail and other industries (Henderson, 1999) Tourism was also the second highest earner of foreign exchange following worker remittances, which account to approximately ten percent of the country’s gross domestic product (Barham, 1998).

Tourism development is inherently a spatial activity, defined as the process of turning territorially defined experiences into commodities by the deployment of physical and human capital to create or enhance such experiences and provide visitors with associated goods, services, and information (Burns & Holden, 1995). Therefore, tourism is a commodity formed by the transformation and packaging of experiences, geographies and cultures into products tourists purchase and consume. In this respect, Jordan boasts a wide range of unique attractions, including sites of ancient historical and cultural significance, major religious sites, and eco-tourism expeditions, which are still relatively undeveloped and undiscovered, yet which poses great tourist potential.

The government of Jordan is implementing efforts to develop its tourist sector through restructuring its administration and formulating “realistic” tourist strategies based on the development of tourism legislation (Kelly, 1998). Nevertheless, despite its importance and potential, the tourism industry has remained highly vulnerable to the regional political instability. Reviving the
tourist sector requires the development of a tourism infrastructure, something that is very absent in all but a few places. However, where infrastructure is developing, naturally there are associated impacts in regards to trades offs with preservation.

1.2. Northern Jordan and the Decapolis Region
This paper focuses on Northern Jordan, an inhabited area in both early and late antiquity and a region more or less occupied continuously for 2000 years, containing ancient Roman cities and sites of religious significance to both Christians and Muslims. During late antiquity, the region was known as the Decapolis, an administrative/ governmental confederation of cities first formed during the Hellenistic period, 332-65 BC (Mare, 1987). This region flourished during the height of the Roman, Byzantine and Umayyad periods leading to the construction of great monuments (Lucke et al., 2005; Fuller, 1987). Figure 2 (below) displays the location the cities of the Decapolis.

As can be seen from the figure, Northern Jordan is home to seven of the Decapolis cities, these include – Jerash (Gerasa), Umm Qays (Gadara), Tabaqat Fahl or Fihil (Pella), Bayt Ras (Capitoliis) and Abila (Quwayliba). Please note that following the Muslim take-over of the area, the modern names were reused, i.e. Capitoliis was again Bayt Ras. Together, these sites have the potential to bestow the visitor with a sense of the magnificence of the Roman world at its height. For example much work has already been

Fig 2 Map showing the location of the Decapolis region. Source: adapted from Mare (1982; 1996; 1997).
carried out on the reconstruction of Jerash, a city straddling one of the ancient world's key trade routes, which offers extensive ruins of colonnaded streets, arches, temples, and baths in varying states and qualities of preservation, reconstruction and entirety (Favzi, 1986).

Umm Qays (Gadara) is probably the most dramatically situated of the Decapolis cities, close to the border with Syria and Israel and is considered the third most popular archaeological site in Jordan, after Petra and Jerash (Tell, 1998). The site includes a stunning black basalt theatre, a colonnaded main street, and a city gate, and enjoys spectacular views of the Jordan Valley, the Sea of Galilee and the Golan Heights. The adjacent town of Umm Qais is relatively large, but has few tourist facilities. There is currently a rest house and a museum, while plans are underway to develop a high standard hotel development of 60-70 rooms, based on the renovation of old buildings (Miller & Kathryn, 1994; Wineland & Downey, 2004).

A little further to the North and West, in the lush green foothills of the northern valley, is Tabaqat Fahl (Pella), which has yielded an impressive display of archaeological evidence revealing human presence from early Neolithic times to the present (Smith, 1985, 1987; Boraas, 1991). The remains of a Bronze Age fort, a 1C AD theatre, a 100000 gallon Byzantine cistern, along with churches, houses and shops from various periods are a testimony to Pella's importance in the ancient world.

Abila (Quwayliba) is another one of the Decapolis cities, lying northeast of Umm Qais and approximately 18 kilometres east of the southern end of the Sea of Galilee (Mare, 1982; 1987). The archaeological ‘window’ of Abila stretches from the Chalcolithic period (3500 BC) to approximately 1500 AD, containing Roman temples, Byzantine churches and early mosques, basilicas and tombs, seemingly making it an idea location for tourism development. However, despite its potential the city remains largely unexcavated and is not targeted for immediate tourist development. In addition, the former
Decapolis city of Bayt Ras (Capitolias) lies approximately 10 km south of Abila, and includes a recently discovered large Roman theatre.

Previously, tourism in Jordan has been confined and focused to the south around the sites of Petra Aqaba and the Red Sea, and has neglected the tourist potential and archaeological sites of the Northern regions. While several cities of the Decapolis, such as Jerash and Umm Qays, are now already among major tourist destinations in Jordan. Though the process of converting these archaeological sites to appealing tourist destinations, significant sacrifices of preservation and sustainability principles were made, especially in the case of Jarash were development has often taken the form of rapid focused haphazardly planned restoration activities. In order to develop a plan for the introduction of a sustainable and responsible tourism to this area, it is first relevant to address some of the problems tourism development generally faces in Jordan.

1.3. The Difficulties of Developing and Promoting Tourism in Jordan

1.3.1. The Development of Tourism in Jordan

Tourism is the world’s biggest industry and the largest contributor to global GDP, of around eleven percent; it boasts the largest generator of employment of up to 200 million positions globally. It also conveys 700 million travellers per year across the globe and ranks one of the top five export industries for eighty-three percent of all countries (Shaw & Williams, 1994). Reviewing figures like that, and considering Jordan’s unique cultural and natural assets, it is little wonder that Jordan has sought to develop its self as a tourist destination.

Jordan and neighbouring states such as Egypt, Israel, and Dubai and to some extent Lebanon have quickly recognised tourism as a strategic economic priority, and have increasingly focused their efforts on tourism development
as a means of economic growth and diversification. This has amongst other things included making considerable public sector investments, and generally creating the underlying conditions for market confidence, dynamism and sustainability. Although, Jordan had been at peace for nearly three decades, uncontrollable regional conflicts effected the number of international tourists that Jordan was capable of attracting. For many years, Jordan and its people, burdened by external debt, had to endure the potential but also of the consequences of the absence of peace in the Middle East, the waste of resources, the frustration and the insecurity, and lack of development (Kelly, 1998).

Following the peace accords with Israel in 1994, Jordan’s potential as a destination increased significantly. Jordan consequently sought advice from various international parties for developing its tourism sector (Henderson, 1997; Kelly, 1998; Burham, 1998). Initially after the signing of the peace treaty, tourism grew eight - ten percent annually, but fresh violence in Israel and the Palestinian Territories in 2000 and the events of September 11th 2001, in which many people including Arabs were afraid of travelling, has meant that the tourism sector has witnessed fresh difficulties (Magabilihl & Al-Shormani, 2003).

1.3.2 The Problems Experienced by Tourism Development

In addition to the obstacles arising from setbacks in the peace process, prosperity resulting from tourism has been limited due to the absence of modern information technologies, the presence of traditional management systems, and the centralized nature of administration within the tourism sector (Hendry, 2000). Moreover, Henderson (1997) states that the tourist sector in Jordan and development in general, also suffers from difficulties related to financing and the high interest rates on loans together with restrictions to guarantee the requirements to obtain banking facilities.

Many authors attribute the majority of responsibility for these problems to the Government and its personnel policies, taxation rates, micromanagement,
and unreliable record keeping (Kelly, 1998; Magablihi & Al-Shormani, 2003). Beyond these problems are other issues to do with guest/host relations, cultural values, and the legacy of over a half-century of wars and enmity toward those who now compose a large portion of its market—the Israeli tourists (Kelly, 1998). In addition, it has proven difficult to make land available for development because of its historical nature, particularly in the northern heights, the Dead Sea and the Jordan Valley.

In the midst of the tourism boom, local investors were quick to expand, often haphazardly, Jordan’s tourism capacity. New opportunities stirred the Jordanian private sector at all levels. Tourism development was promoted as a tool to promote national growth, not simply to benefit firms already working in the sector. The economic potential of tourism development seemed to provide potential opportunities for almost anyone regardless of skill, profession, or even capital endowment while avoiding the question of the limits or distribution of these gains.

Resultantly, tourism development in the wake of the peace process resulted in the unsustainable over-commoditisation of the tourism landscape. This can be seen clearly around Jarash and Petra where creating tourist products (such as hotel rooms, handicrafts, and cultural experiences) proved easier and more accessible to local entrepreneurs than attempting to coordinate and ensure demand for such products (Henderson, 1997). In addition, there is the shortage of cadres and fully trained technical labour that are qualified to work in the newly erected sector (Kelly, 1998).

However in spite of the above tourism still has the potential to positively effect remote communities where various cultural and archaeological tourist attractions are located. Often, these remote areas in Jordan lack the components of other sustainable industries like agriculture and manufacturing and are therefore more reliant on tourist-driven services and industries for their development.
Jordan experiences the challenge of possessing one of the highest densities of archaeological and areas of special scientific interest sites in the World. This observably requires a high degree of management but leads to the potential for Jordan’s tourism sector to diversify into several distinct segments, including cultural heritage, eco-tourism, health and leisure, which have all emerged as a niche markets in the last few decades. One such region where these forms of tourism could be ideally developed and is dearly sought after could be aforementioned Northern Jordan and Decapolis region.

Tourism facilities are currently relatively undeveloped in the region. However, the potential ability and opportunity of the tourist to access thematically related Decapolis sites in Jordan opens opportunities for developing the tourism potential of the region. In addition, the region of Northern Jordan in is close proximity to the Dead Sea and other numerous historical, scenic and religious attractions.

However before any development can take place in the Decapolis region, the environmental and cultural assets of the region have to be evaluated in order to locate the sites with the greatest tourist potential and to identify the future tourist markets. An added requirement is the assessment and development of the regional infrastructure; this would consist of road rehabilitation, urban infrastructure development, site enhancement, visitor management and not least environmental protection and management. Project components would then potentially include visitor centres, renovation of some of the archaeological sites, while at the same time maintaining, and minimising adverse impacts on the regions archaeological and environmental integrity.

It is hoped that the identification, restoration, and preservation archaeological sites in Northern Jordan will in turn aid the attraction of a steadily stream of visitors from around the globe, thereby expanding employment opportunities in the region. The issue that now arises is however,
how to safeguard the cultural and natural resources of Northern Jordan, and in particular the Decapolis region to ensure a sustainable development that maintains both economic growth and the fullness of the cultural and natural diversity for the present and future generations of visitors whether local or foreign.

The potential outcomes for tourism development in Northern Jordan and the Decapolis region are ideally suited to support the Government of Jordan’s wider development goals. In such that the development of tourism is able to provide infrastructure services for private sector development, provide and generate rural non-farm income, promote gender equality and the empowerment of women (Sharaihi & Collins, 2001). Additionally increase public participation and civic engagement and social inclusion of the local population, and furthermore, the development may help educate the local population on environmental policies and institutions, environmental commons and ensure environmental sustainability while promoting cultural understanding.

1.4 Tourism and Archaeology

For many countries, especially those with relatively few natural resources other than their cultural, scenery and climate such as Jordan, alternative development opportunities are often lacking. It is therefore not surprising that many countries have chosen tourism as the industry upon which to build their economy and improve the material wellbeing of their people. Tourism now represents a significant part of the economic turnover of many countries of the world, and in many of these the ‘cultural tourism’ as it has come to be known is a highly significant part of the tourist opportunity.

Cultural elements have always been part of the total tourism experience. Cultural tourism started to be recognized as a discrete tourism category in the late 1970s. At the beginning, it was regarded as a specialized niche activity confined to a small number of better-educated, affluent tourists. In 1990s
cultural tourism was recognised as a mass-market activity. Nowadays it constitutes a main branch of tourism and 35-70 percent of tourists are considered cultural tourists (McKerchner, 2002).

Heritage is an integral part and resource of cultural tourism. However, the inescapable relationship of heritage and tourism is not necessarily without controversy. Heritage is the common resource of cultural heritage management and tourism management. A clear discrepancy emerges between views of cultural heritage management and tourism management on preservation and use of heritage. Cultural heritage management assesses heritage regarding its intrinsic merits while tourism management sees heritage it as a raw material. Cultural heritage management aims at conserving heritage for these intrinsic and existence values to reach non-profit, social goals. On the other hand, tourism management opt to use values of heritage for their intrinsic appeal to reach commercial profit. In many cases, there is a trade-off between two to overcome the differences, tourism sacrificed for heritage or heritage sacrificed for tourism. Subsequently, tourism, for which sometimes heritage is sacrificed, is seen as a both positive and negative impact on conservation of cultural heritage.

As in the world generally, archaeological sites constitute a significant part of Jordan’s cultural heritage and under increasing pressure of cultural tourism. Two major tourist destinations in Jordan, Jerash and Petra, are both archaeological sites, while the latter is a combination of cultural and natural heritage. Numerous minor archaeological sites are scattered around Jordan. In a country, which is inhabited for 10,000 years, more archaeological sites are promising to be uncovered. Among over 360 prominent tourist destinations in Jordan, over 220 of them are archaeological sites. These archaeological sites, whether uncovered or not are under direct or indirect threat of tourism development. Rapid tourism development, which means more hotels, infrastructure, and transportation, causes swift construction and eventually indirect destruction of archaeological sites. Moreover, archaeological
heritage management often perceives presentation of archaeological sites to public by tourism management as causing loss of authenticity and historical evidence.

In Jordan, reconstruction is one of the most prevalent methods for the presentation of archaeological sites and is under consistent and strong criticism from the preservation field. To many conservationists, reconstruction practice in the archaeological sites of Jordan is considered as a menace to integrity as well as direct destruction.

Abila, which is still undeveloped as a tourist site, can be considered, to a certain degree immune to the above mentioned problems. However, it is inevitable that Abila will face almost identical obstacles if it begins to develop as a tourisy archaeological site. Naturally, presentation of the site to the public and its tourism development plan will be the most controversial issues between tourism management and heritage management. A glance at reconstruction cases in other Decapolis cities, which exhibit many of the common archaeology values as Abila, will give an invaluable insight. Therefore, it is essential to focus on the reconstruction concept and its practice in Decapolis, to consider what can be reconstruction’s role in the tourism development of the Decapolis region and preserving its cultural heritage.
2. Approaches to Reconstruction

2.1 Concept and Content

In the field of preservation, “reconstruction” primarily indicates a physical rebuilding activity of historical structures/sites, which partly were or completely disappeared. In this sense the Burra Charter (1979) defines restoration and reconstruction as:

**Restoration:**

“Returning the existing *fabric* of a place to a known earlier state by removing accretions or by reassembling existing components without the introduction of new material”.

**Reconstruction:**

“Returning a place to a known earlier state and is distinguished from restoration by the introduction of new material into the fabric. New material may include recycled material salvaged from other places”.

Various academic and practice-oriented sources (Bucher, 1996; Dorvill, 1982; Fitch, 1982) in the field of preservation largely share this definition, which emphasizes the difference between reconstruction and restoration in use and amount of new materials utilised. Restoration is primarily depicted as a conservation process in which buildings and/or artefacts aimed to be preserved in their existing form. On the other hand, reconstruction suggests a deliberate re-formation of the building and/or artefact prior to preservation.

Furthermore, the usage of the term “reconstruction” can have subtle variations in its meaning. In addition, specific terms are used for particular “reconstructions” in the fields of archaeology and preservation. Presenting meanings of these prominent terms is a prerequisite for a further clear analysis on the subject.
Reconstitution can be regarded as a level of reconstruction in which intervention is confined to reassembling either *in situ* or *ex situ* in a new site. Reconstitution *in situ* is usually the consequence of disasters such as war or earthquakes, where most of the original material remains but dismantled and scattered form (Fitch, 1982). Anastylosis, which is a lesser used term in the conservation field, also indicates the reassembling of a ruin by using the original material. It is defined as the re-erection of fallen fragments of ruins in their original position (Feilden, 1997 Bucher, 1996). Simply, anastylosis is almost synonymous with reconstitution and can be considered reconstitution *in situ*.

Replication is another specific type of reconstruction, which does not involve the original material usage or *in situ* erection. In case of architecture, Fitch defines replication as: “construction of an exact copy of still-standing building on a site removed from the prototype”. Generally, replications stand in the open air as a surrogate for an original, which often must be moved to the controlled environment of a museum or storage facility. In other words, the replica coexists with the original (Fitch, 1982). Reproduction has mainly the same meaning as replication.

As mentioned above, in the sub-fields of archaeology there is also usage of terms that are connected to the reconstruction concept. Experimental Archaeology is one of these sub-fields that involve reconstruction. Dorvill (2002) defines experimental archaeology as “a branch of archaeological investigation in which carefully controlled experiments are undertaken in order to provide data and insights for interpretation of archaeological record”. These experiments vary widely in their nature and purpose, covering experimental earthworks or reproduction of ancient tools (Dorvill, 2002). Looser definitions also emphasize the presentational character of the experiments or reproductions. Consequently, in this context, reconstruction (or sometimes simply construction) consists of interpreting the past and often creating and presenting it physically again, such as by building an Iron Age village.
Digital Archaeology is another relatively new method in archaeology, in which contemporary computer technology is used extensively for archaeological documentation and interactive fieldwork. 3D Reconstructions are three-dimensional models of ruined sites or monuments created in digital archaeology by using digital programs and digital photography (Dorvill, 2002).

Activities relevant to the reconstruction idea exist also out of the archaeology field. Historical re-enactment is an activity in which participants recreate some aspects of a historical event or period. It may be a narrowly defined period, such as a specific war or other event, or it may be more broadly defined. During an historical re-enactment history is reinvented as an entertainment to suit contemporary convenience or sensibilities (Dorvill, 2002).

Although the mentioned terms have subtle differences, they all stem from the same concept. Reconstruction as a presentation method in heritage and archaeological sites, mentioned terms however, constitute various levels of this method. For instance, in a reconstitution, archaeologists are the presenters, who plan and do the reconstruction; for visitors of the site, who are viewers; by physical construction, which is the medium. On the other hand, in a 3D reconstruction, presenters and viewers become more specialized in creating and perceiving reconstruction, in the medium of digital drawing. Consequently, all forms of reconstructions can be perceived as part of a presentation of given heritage site, which consist of the presenter, the viewer and the media. Since this paper focuses on Northern Jordan’s Decapolis archaeological sites, the following chapters of the paper will highlight reconstruction in relation to archaeological sites.

The contemporary concept of reconstruction in the western world is the outcome of a century’s long evolution of practices and debates on the subject, which are closely correlated with the history of preservation. A brief overview of the development of the reconstruction concept is essential for
further assessments. Such an overview is also reasonable for Jordan, since its present preservation practice is mainly based on the western concepts of conservation.

Even since ancient times, civilizations had ideas and concepts of the memorial, which needs to be preserved. In ancient Greece in the first century BC, Greeks were restoring and reconstructing buildings aiming at maintaining the original style, although it was not always the common practice. For instance, after a fire, parts of the Erechtheum of Athens were dismantled and reconstructed again while the original style was endeavoured to be kept with substitute materials (Jokilehto, 2002).

The restorations of monuments or memorial objects were subjects for theoretical debates in ancient civilizations. In the fourth century BC, a boat, which had symbolic and historical significance, was preserved until the time of the Demetrius of Phaleron. The boat was preserved by replacing rotten planks by new ones, so that after a while the boat was completely renewed. For this case, some philosophers claimed that boat had lost its authenticity, because its physical entity could not been retained (Erder, 1986).

In rare circumstances, memorials were also relocated in the ancient era. For instance, during reign of the Roman emperor Augustus, the temple of Ares was transferred to Athenian Agora after more than 4 centuries after it had been originally built. It was dismantled stone by stone and again systematically reconstructed in Athenian Agora. The intention of the relocating was twofold: upkeep of the temple in its new site would be easier compared with its former neglected location; and the Roman emperor would able to impress the Greeks by his respect for the temple (Erder, 1986).

As the examples indicate, the main concepts of contemporary reconstruction practice date back to the antiquity. It can be said that, the prime reasons of preservation, which also prevails in the modern age, had already emerged in
the antiquity. In the case of Erechtheum, the attitude was to preserve a style that was admired; on the other hand, the boat in the Demetrius era was preserved due to its symbolic and historic meaning. Relation between authenticity and material continuity had emerged as a topic, which has remained controversial until present.

A new era for the ancient heritage and its material remains begun after the dissolution of the Roman Empire. Due to the loss of their initial building functions and meanings, ancient monuments were either converted into new functions or used as a source of spoil material. Nevertheless, classic heritage continued to have a presence as ancient ruins and monuments (Jokilehto, 2002).

During and after renaissance in Europe, ancient ruins and monuments started to be seen as a reminiscent of the grandeur of the ancient past. Collectors, such as the Medici family, gathered antiquities. These pieces of arts, such as sculptures or architectural fragments, were restored and completed by foreign materials to be later re-erected in gardens, or on buildings, of the new owners (Jokilehto, 2002). A consequential discussion on the subject, which is still current in the conservation field, aroused from these practices. One viewpoint stood up for the completion of artefacts as perfect as possible. On the other hand, other views supported the preserving of artefacts by minimum intervention. In summary, the basis of the modern discourse on the preservation that emerged in ancient ages was decisively formed during the renaissance period.

Following the renaissance, the growing interest in archaeology and ancient civilizations resulted in extensive excavations at archaeological sites. In the 18th century, new discoveries in recently dug archaeological sites, such as Pompeii and Herculaneum, astonished and captured the public’s imagination. At this time unearthing begun to take place systematically with concurrent documentation. Furthermore, instead of only exhibiting art objects, the actual areas of the archaeological sites started to be displayed,
in Pompeii for example. Some buildings were reconstructed partly, such as “Caserma dei Gladiatori”, in order to give an idea of its form and dimension (Jokilehto, 2002). This can be seen as the earliest instance of reconstruction in an archaeological site for the presenting of an ancient monument to the visitors and archaeologists.

The archaeological site in Acropolis, Athens began to be excavated in 19th century. The Acropolis site displayed dense overlapping of historical layers. However, with a clear and subjective selection from the beginning, reconstructions aimed to recreate only classic Greek splendour. There was very little concern for non-classic buildings but an attempt was made to preserve the picturesque character of the site (Jokilehto, 2002). Such cases prompted debates on subjectivity that caused the loss of many other valuable historical layers.

Concepts of preservation and restoration were clearly distinguished and reshaped in the 19th century. To preserve was to retain the existing fabric with as little intervention as possible, contrary to restoration, which was suggesting reconstruction to certain degrees. Harsh criticism of restoration, which in present terms corresponds to reconstruction, begun on the grounds of authenticity and accuracy. Large-scale reconstructions with substantial amounts of new material and with little evidence of accuracy were considered unacceptable and unauthentic. In every case, distinction between the original and the reconstructed was expected to be significant and to be clearly presented. All these developments were reflected in new national legislations that address issues of preservation and restoration.

By beginning of the 20th century sharper definitions of practices of preservation were made literally and in applications. Terms such as replacement, renovation, and renewal were introduced and defined (Barker,

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5 By the passing of the time the meaning of the term, “restoration” had changed. In the 19th century, restoration was also suggesting present reconstruction. Preservation corresponding to the present restoration practices.
Consequently, by the beginning of the 20th century, today’s definitions of restoration and reconstruction were decisively formed.

The 20th century witnessed an obvious increase in the number and diversity of reconstruction practices due to the expanded scale of heritage preservation. Fast growing tourism became a significant impetus in heritage preservation. Reconstructions, as easily perceivable presentations of the past to visitors of heritage sites became frequent. Ancient cities, for instance Ephesus in Turkey, were gradually rebuilt to attract visitors by the reconstructions of the prominent and photogenic monuments. Strong scholarly criticism of such reconstructions prompted innovative ways of interpretation and presentation of heritage sites (Fitch, 1982).

In the 1950’s experimental archaeology started to use reconstructions as a tool of research and presentation. Reconstructed sites located near the original archaeological sites, such as prehistoric villages, became approaches to present the past (Stone, 1999).

The main theoretical topics of the reconstruction concept, such as authenticity of a reconstruction, prevailed and elaborated through the ages. In spite of ongoing discussions on the subject, it can be said that a common approach has been established for the reconstruction field in accord with historical development of the subject. This mainstream approach became tangible by related chapters of international charters and national acts. In particular, the Venice Charter (1964) and Burra Charter (1979) were decisive in establishing a mainstream preservation, and consequently reconstruction idea.

### 2.2. Reconstruction Practice

As mentioned, reconstruction can be perceived as a metaphor, a presentation to a particular audience. A general examination of main
discussions on reconstructions reveals several important themes: why, what and how to present.

Why Reconstruction?
Based on Stone (1999) classification of the aims of reconstructions three main groups emerge;

1. Archaeological experimentation: in which archaeologist intends to provide data and insights for interpretation and to propose the nature of the original structure. In many cases, reconstructions for archaeological experimentation also serve educational purposes.

2. Education: in which the archaeologist/educator aims at informing a certain part of public of the facts of a heritage site, architectural history or archaeology.

3. Display: which can be divided into three sub-aims;
   a) Interpretations: which reflect academic viewpoint on a particular period/site.
   b) Building up cultural identity: which tries to create a view (generally subjective) of the past of a local/national community or an artistic/architectural style.
   c) Tourism development, which tries to prompt development for any branch of tourism.

In many cases, combinations of these factors prompt reconstructions. In Jordan, tourism development emerges as the most prominent factor in archaeological reconstructions. Therefore following sections will focus on role of tourism development in reconstructions at archaeological sites.
What to reconstruct?

Reconstructions are part of the presentation of heritage and archaeological sites. Deciding what to present is a crucial part of the presentation. Almost all archaeological sites consist of numerous historical layers. Ideally, a preserver perceives each layer in equal importance due to their historical significance. Existent archaeological sites are seen as a scientific document, a historical layer. On the other hand, tourists generally expect reconstruction of a visually appealing photogenic layer even at the expense of unappealing ones. At this point, the preserver and the visitor value different merits of the cultural heritage. On the preservation side heritage has an existence value and have to be conserved for its intrinsic values, on the tourism side it has a use value that can be used for their intrinsic appeal (McKercher, 2002).

Reconstruction in heritage/archaeological sites, which aims at fostering tourism, should inevitably consider common tourist expectations. However, expectations of visitors from a heritage site, presenter’s priorities and preservation requirements do not necessarily coincide. Preservation and tourism priorities (or in other words cultural heritage management and tourism management) can contradict in various levels, including what to present.

For instance, for the archaeologist, a roman temple that is lying in ruins is an eloquent testimony to the force of the earthquake, which had destroyed it. For the visitor it is simply meaningless heaps of stones and he/she not surprisingly expects a reconstruction that will make the site more appealing for him/her. From preserver’s point of view, such a reconstruction would be unnecessary because everyone knows how a roman temple looks like and one phase of a historical site should not be opted at the expense of other (Feilden, 2004).

Certainly, presentation has to consider visitor demands but should not yield to them. Favouring a historical layer to the present, even it would please the visitor, is not justifiable. Attractiveness of a heritage site should be reached by
intelligibleness and innovativeness of the way that the site is presented, but not by selection of an appealing subject. If the presentation of the heritage or archaeological site covers a reconstruction, than it should aim at presenting as much as possible of the historical layers. For instance, displays of a ruin, whether reconstructed or not, should be enhanced by the restoration of the immediate area adjacent of the original building. The presentation of a ruined castle for example, should cover surrounding ditches, which reflect the originally wet moat (Thompson, 1981). On the other hand, if the reconstructed monument in question was preceded by other structures, traces of their existence should also be presented.

How to do Reconstruction
As presented in preceding chapters, reconstruction is an immensely diverse and broad field. It is not possible to talk about a concrete and abiding formula for “good” reconstructions, instead generally guiding principles for a reconstruction steps can be pronounced.

Every archaeological site is source of historical evidence. Therefore, beforehand any reconstruction, which will inevitably entail disturbance of the existent evidence, intensive archaeological investigation has to be conducted. The site should be excavated to its last major of state use, to reveal its formation and construction. A complete scientific documentation has to also ensure that historical evidences will be retained (Thompson, 1981; Barker, 1999).

Following the straightforward investigation stage, reconstruction faces many challenging tasks. Complicated cases bring issues of authenticity, overlapping layers, accuracy of historical data forward. Among all these arguments, controversial demands of tourism management and heritage management emerge as the most crucial. Presentation expected to keep visitors from being disappointed, to teach critical evaluation and to achieve high preservation standards (Davis, 1998). It must be recognized that not all
the visitors wish to make the concentrated effort that an appreciation of a ruin requires (Thompson, 1981). Many visitors would like to see a full scale reconstructed monument that can be effortlessly appreciated. However, in most cases archaeological and documentary evidences are not enough for an accurate reconstruction. The presenter has to look for innovative ways of reconstruction rather than conjectural designs that cannot be verified.

A well-known and groundbreaking example that has successfully satisfied preservation and visitor demands is the museological handling of Franklin Court (Figure 3). Benjamin Franklin’s home in Philadelphia was planned to be prepared for celebrations in 1976. Following an exhaustive program of archaeological and archival research, the general assumption was the reconstruction of a museum house of Benjamin Franklin’s original house. However, research uncovered little pictorial or graphic evidence of what the house had actually looked like. Therefore, only market street rental houses facades were reconstructed. The Franklin house was outlined by metal frames and the plan of the house was traced out in the paving instead of an orthodox reconstruction of the house. The display is made even more moving by inscriptions carved in paving and excerpts from letters between Franklin and others during his life. A museum and a movie theatre were located below ground in the former courtyard of the house. Overall, project is doubtlessly is amore stimulating re-creation of the vanished houses than any actual reconstruction (Fitch, 1982).
Franklin Court was a groundbreaking example that showed reconstruction should not be regarded as a state of a building or a level of restoration. Instead, architects conceived reconstruction as an innovative tool and utilized it in the broadest way. By its very nature, the question of “how to do a reconstruction?” is controversial and does not have a single answer due to the diversity of cases (as this case constitutes a profound example). Nevertheless, as mentioned, there are basic guiding preservation principles that are generally agreed upon. Related section of the Interior’s Standards, which is the most recognized source for appropriate treatment of historic building features and materials in the United States, can introduce formalized basic guidelines of how to reach a reconstruction, which is in accord with basic preservation requirements (Greene, 2002).

1. Reconstruction will be used to depict vanished or non-surviving portions of a property when documentary and physical evidence is available to permit accurate reconstruction with minimal conjecture, and such reconstruction is essential to the public understanding of the property.

2. Reconstruction of a landscape, building, structure, or an object, in its historical location will be preceded by a thorough archaeological investigation to identify and evaluate those features and artefacts which are essential to an accurate reconstruction. If such resources must be disturbed, mitigation measures will be undertaken.

3. Reconstruction will include measures to preserve any remaining historic materials, features and relationships.

4. Reconstruction will be based on the accurate duplication of historic features and elements substantiated by documentary and physical evidence rather than on conjectural designs or the availability of
different features from other properties. A reconstructed property will re-create the appearance of non-surviving historic property in materials, design, colour and texture.

5. A reconstruction will be clearly identified as a contemporary recreation.

6. Designs that were never executed historically will not be reconstructed.
3. Reconstruction Practice in Decapolis Sites

As it can be easily perceived by even an ordinary tourist, archaeological sites in Jordan have numerous reconstructed monuments. Furthermore, many prominent monuments are still under reconstruction and even more reconstructions are planned. A closer look is necessary to consider the nature and intended outcomes of the reconstruction practices in the Decapolis archaeological sites.

The first reconstructions in Jordan date back to the beginning of 20th century, when extensive archaeological excavations had firstly begun. Archaeological excavations at the end of 19th century and in the early 20th century were usually conducted by western excavation teams. Following excavations, limited reconstructions, which were mostly confined to anastylosis of columns or consolidation of ruins, took place (Browning, 1982). The scope of the reconstructions gradually broadened and eventually reached the present extensive level via the obvious impetus of tourism interests. Alterations to form and the vast amount of reconstructions since the beginning of 20th century, reflects changing priorities in the management strategies of the Decapolis archaeological sites.

During the Jordan Excursion within “Landscape Archaeology Study Project”, three Decapolis cities were visited: Jerash, Umm Qais and Abila. At these sites, we had the opportunity to observe cases of reconstructions in these Decapolis cities. Two of these sites, Jerash and Abila represent contrary cases: the former, a reconstructed and well developed tourist venue; the latter an undeveloped and almost unnoted archaeological site. Therefore, the following case studies, focus will be on the differing Jerash and Abila to able to understand the evolving role “reconstruction”.

3.1 Jerash (Gerasa)

Jerash is undoubtedly the most impressive of all Decapolis cities (see Figure 4 overleaf). It has been remarkably well preserved with its oval plaza, theatres, colonnaded street and other remains (Hoffmann, 2002). Nowadays Jerash is located roughly 70 km north of modern Amman. Human habitation in Jerash dates back to Neolithic times. The city of Jerash was at the zenith of its prosperity between the 1\textsuperscript{st} century BC and 3\textsuperscript{rd} century AD. The ruins of Roman memorials/buildings and Byzantine churches of this periods created today’s spectacular archaeological site. The Figure overleaf displays a plan of the Jerash site.

![Figure 4: Plan of the Jerash site showing the walled structure of the city and the location of the main gate entrances.](image)

Jerash was rediscovered by western archaeologists, during Ulrich Jasper Seetzen’s expedition, in 1806. The discovery of Jerash immediately attracted the attention in the archaeology field and prompted further excavations (Hoffmann, 2002). Following several other visits by explorers between 1865-1880, the first surveys and photos of Jerash were taken (Hoffmann, 2002). In
1878 the Ottoman government had installed a community of circassians, which would expend over time and would give rise to the modern Jerash surrounding ancient city (Khouri, 1986).

Repair and conservation of monuments in Jerash started in 1920s; the work was entrusted to George Horsfield, who was the first director of the newly founded Jordanian Department of Antiquities. His works on monuments were mostly confined to rudimentary maintenance (Browning, 1982). Meanwhile, archaeological evidence and knowledge that would be used in future reconstruction begun to be collected. More extensive archaeological excavation and architectural research was started in 1928, for a six-year term, by a joint Anglo-American team (Khouri, 1986). Excavations continued in Jerash limited in scope, in the following decades. Up until the 1980s not so much had been changed in the physical appearance of the memorials apart from minor consolidation work of the main structures.

In the 1980s the joint Petra- Jerash project and a five year plan for Jerash begun to be implemented. The Petra- Jerash project was aimed at making Jerash and Petra the two chief tourist attractions of Jordan. Jerash was seen as a potential site, which was required to be preserved and presented properly in order to increase income generated from it (Favzi, 1986). In 1982, a joint project by international archaeological groups set out with a management and main financial contribution from the Jordan Government. Massive scale excavations were started within this joint-project (Browning, 1982). Excavations and the project prompted reconstruction of numerous monuments in Jerash following 1980s. The South Gate, the South Theatre and the Hadrianic Arch are some prominent monuments in Jerash, which were partly or completely reconstructed by 2005. Meanwhile (in 2005) reconstruction activities are ongoing on several other structures.
The South Gate

The South Gate is the grander of the two principle entries to the city, which was built most probably in AD 130. It is a stone triple archway with a tall central opening flanked by two adjacent lower ones. In 1927, before any restoration had taken place it was half demolished, with architectural elements lying around (Figure 5) (Browning, 1982).

Sufficient architectural elements were found to determine the appearance of the lower sections of the Gate, but the character of the superstructure could not been drawn clearly by the existing material evidence (Browning, 1982).

Figure 5  Photograph of the South Gate of Jerash in 1927. Source: Browning (1982).
The south Gate was reconstructed as a tourist entry point to the historical city following the international excavations that begun in 1982 (Figure 6). The structure was consolidated and fallen elements were reconstituted. A full-scale reconstruction was avoided not to invalidate the historical integrity of the monument. New materials used for the reconstruction were not carved precisely, in order to distinguish them from authentic material. Although application of the reconstruction was satisfactory regarding mentioned facts, a serious negative point has to be mentioned. The determination of the south gate as the tourist entrance was ideal; however situating tourist centre adjacent to it, is archaeologically not acceptable due to its location on the line of ancient road (Browning, 1982).

The South Theatre
The South theatre is one of the most impressive of Jerash’s public buildings; construction of it was begun at the end of the 1st century AD and completed in the early second century. It was larger of the city’s two theatres. It is semicircle in plan and could host 3000 spectators (Khoury, 1986).
Figure 7  Photograph of the stage area of the South Theatre in 1927, Jerash. Source: Browning (1982).

Figure 8  Reconstruction drawing of the South Theatre. Source: Browning (1982).

Figure 9  Photograph of the South Theatre in 2005, Jerash.
From its rediscovery at the beginning of 19th century till 1925, the South Theatre remained untouched by physical interference. By 1925 Horsfield’s priority in Jerash was the conservation of the theatre. Repairs were made to the sidewalls and the whole stage area was revealed (Figure 7). It stayed roughly in the same condition until 1980s. In 1980s, the whole area at the back of the auditorium was cleared so that the outer walls were again free standing. As part of the Jerash-Petra project the south theatre was partially reconstructed (Browning, 1982). In the scope of this reconstruction work, the stage floor, the first storey of the stage wall, and the north outer wall were reconstructed (Figure 9).

A general lack of documentary and physical evidence for the reconstruction; or even that they have existed and an indifference to historical facts has to be mentioned regarding the reconstruction work. The stage floor, which originally may had a wooden floor, was reconstructed by stone (Khouri, 1986). The outer wall was faced by harsh looking stone, although there was no evidence for its prior existence. Moreover, verifiable or not, reconstructions were not clearly distinguishable as new additions and such information is also not offered by information boards around the monument.

The Hadrianic Arch

The Hadrianic Arch was built around 129/30 AD, outside of the city (Figure 10). It stands on the crest of a hill. This was a triple archway, with a wide central opening nearly eleven meters high, flanked by two narrower and lower arches (Browning, 1982).
Figure 10  The Hadrianic Arch in 1929, Jerash. Source: Browning (1982).

Figure 11  Reconstruction drawing of Hadrianic Arch. Source: Browning, (1982).
During their work between 1931-34, the American Expedition discovered the dedication inscription of the Hadrianic Arch along with almost every element of the design. So it was possible to produce a remarkably accurate reconstruction drawing of the monument (Figure 11) (Browning, 1982). Following the Petra-Jerash Project, the Hadrianic Arch was also reconstructed (Figure 12). Its reconstruction is well substantiated on historical evidence and therefore undisputable. However, the distant skyline should be considered as part of the monument as new buildings out of the scale could destroy the message of a walled city. Heavy traffic and unappealing modern constructions nearby are clearly spoiling meticulous the reconstruction of the arch.
Historical enactment in Hippodrome

The Hippodrome is located north of Hadrianic Arch. Much smaller than its contemporaries, it is roughly 50m wide - 240 meters long and overlooked by 16 rows of seats resting on a system of rising arches. There were chambers below the seats used as shops, storerooms, etc (Browning, 1982).

The Hippodrome has suffered badly over the years. The outline of the eastern wall was traceable, the southern line was less well preserved, and the western side was almost vanished at the beginning of 20th century. Partial excavations undertaken by the American expedition after 1931 revealed enough to determine its plan (Browning, 1982). However, doubts over its construction date, even whether or not it was finished or inaugurated remained due to lack of evidence (Khoury, 1982).

Targeting tourist population in Jordan, a private company (the Jerash Heritage Company), formed in 1998, stage daily presentations of Roman warfare techniques and chariot races in the Hippodrome. The company is comprised of mix of entrepreneurs, an owner of a stable, a technical advisor on Roman warfare, a scholar and advisors on chariot construction, antiquities and restoration advisors, investors (Jarash chariots, 2005). The Figure below shows one of the enactment scenes.

Figure 13  Photograph of a Historical enactment, Jerash. Source : http://www.jerashchariots.com/
The Project stemmed from the passionate interests of a Swedish national. His proposal, to form a private company that would re-enact Roman history and chariot racing in Jerash, was accepted by Jordanian Tourism Ministry in 1998 (Sawalha, 2005). As part of its agreement with the Ministry of Tourism and Antiquities, company has leased the hippodrome and adjacent areas in Jerash from the Government of Jordan. According to the agreement, the Jordanian government financed the restoration and reconstruction of the hippodrome. The company undertook the organization of the performances which aimed at adding value and creating entertainment to the visitor experience. For the performances, the company recruited and trained ex-army and police personnel from the Jerash region. Costumes, chariots etc. were reproduced with assistance of experts. Ten carceres (starting gates for races) were reconstructed at the southern end of the arena. Stone seating has been also reconstructed to a capacity of around four hundred people. In addition, the hippodrome floor was covered by a thin hard surface layer and dusted with sand for the performances. A standard performance depicted by the Jerash Heritage Company (2005, pp 4) is:

“Legionaries in full armour will march through the Jerash site heralding the upcoming performance with trumpets in anticipation of the exciting events to follow. Tourists to Jordan will then witness a unique performance in an authentic setting at the Jerash hippodrome. A speaker will welcome the audience and throughout the performance, in several languages, elucidate what is being shown. To add to the enthusiasm martial music on a massive sound system will accompany the performance. More than forty legionaries will show Roman Army drill and war tactics using all their weapons. Swords, shields, daggers, javelins, bows and arrows, slings and a big catapult throwing stones along the length of the hippodrome will be used. During intermissions, eight gladiators will fight close to the spectator seats. Following the Roman Army performance, a triumphal chariot with four horses abreast will parade in front of the audience. This will be followed by the introduction of four two-horse racing chariots, first parading and then competing in a seven-lap race, full of dramatic events, beginning at the south end starting gates. The winner will receive his laurel from the tribune after which the show ends with a parade of all the participants. The total length of the performance will be just over one hour and is planned to start before noon when most tourists have walked through the Jerash site and it is too early for lunch”.
On May 9 2005 the first performance, albeit not official, was conducted. The performance included forty-five costumed legionaries demonstrating their weapons and their usage and executing various battle formations. A gladiator fighting and a chariot parade were also performed. Music from an installed massive sound system also accompanied the show.

Historical re-enactment in the Jerash Hippodrome is well organized and constructed as an entertainment or venture but has been criticized from the preservation point of view. As in the case of the South Theatre, reconstruction was not based on firm evidence. The reliability of reconstructions of the starting gates is hard to prove. The content of the performances reflect the passions of organizers more than historical facts. Performances cover gladiator fights but not camel and horserace that are more likely to be held there. If the performances’ aim is to entertain instead of reflecting history, which is the case, at least it should be stated clearly and the organization should not claim the contrary.

Jerash Conclusions
Indisputably, reconstructions in Jerash act as a positive stimulus to tourism and the local economy. Reconstructions, like that of the South Gate and the Hadrianic arch, have contributed a lot to their appreciation by visitors. Meaningless heaps of stone were converted into architectural expressions by generally adequate reconstructions. Reconstruction works, as building activities or as re-enactment, created job opportunities for locals and localised the tourism benefits.

However, there are doubts in the general picture. Although monuments were in diverse conditions, reconstruction works on them were almost identical. Historical evidences for the Hadrianic Arch and the South Theatre were so different, while almost every detail about the Hadrianic Arch was known;
theatres architecture was just a blur. They were reconstructed to the same level and in the same way. Physical similarity was preferred to an overall presentation concept to create unity at the site. However, it is hard to argue that integrity of the site is still undoubtedly intact. In heritage sites there is always a thin line between effective interpretation and archaeological Disneyland or theme parks. Over and uncontrolled reconstructions pose a clear menace to the authenticity of the site (Cleere, 2000). Khina, a Museum City in Uzbekistan, is a typical example of crossing the line by over-reconstruction. In Khina buildings from 14th-18th centuries have been excavated and extensively restored, so that they look like new. Wax models were placed in the buildings to present former lifestyles. Some buildings adapted new functions as tourist restaurants, hotels. In overall effect an authentic archaeological site virtually reduced to a theme park.(Hendry, 2000) By the over-reconstruction of monuments and unlinked entertainments, there is also doubts about integrity and future of Jerash. Palpable concerns over integrity of Jerash and other Decapolis cities which will undoubtedly experience similar ambitious tourism development projects should be seriously taken into consideration.

3.2 Abila (Quwayliba)

At present Abila is an unattractive archaeological site, which simply reflects a miscellaneous scattering of artefacts on a hilly landscape (see Figures 14 and 15 overleaf). It is located about 13 kilometres North of the modern city of Irbid. The earliest history of the city dates back to the Neolithic times. Human habitation in Abila continued in the following centuries and is marked by edifices in Roman and Byzantine periods (Afanasyeva, 2005).
Ruins of Abila

Basilica (7th Century in area D)

Basilica (Cruciform basilica area E)

Tombs

Figure 14 (a, left) Contour map of Abila and Wadi Qweilbeh. Source: adapted from Abila Archaeology Project (2005).

Figure 15 (b, right) Plan of the Abila site. Source: adapted from Mare (1987).
The first archaeological research in Abila was carried by Ulrich Seetzen in 1806. At that date, the city was lying in ruins with no standing monuments. Eighty years later, the first scholarly work on Abila was published by Gottlieb Schumacher following his expedition to the city (Mare, 1982). In 1959, the Department of Antiquities started excavations in Abila which resulted in the uncovering of numerous tombs and the graveyard (Shunnaq, 2002). In 1979, Harold Mare, a professor of New Testament studies at the Covenant Theological Seminary in Saint Louis, begun the archaeological survey of Abila, which still is ongoing, by the permission of Department of Antiquities of Jordan. Excavations were usually conducted once every two years. Between excavation years reconstructions, which were mostly confined to the reassembly of fallen columns, were conducted from time to time (Afanasyeva, 2004).

Basilica (7th century Basilica in area D)

A 7th century Byzantine Basilica is located on top of Umm Al’ Amad Hill (Figure 16). It measures approximately 20 metres in width and 41 metres in length and consists of a nave and two transepts. The width of the nave is roughly 10 meters (Afanasyeva, 2004). Two parallel rows of basalt and limestone columns, which were most probably placed in alternating pattern, stand on two sides of the nave (Afanasyena, 2004; 2005). The apse was the central feature of the basilica, which is a common characteristic of most basilicas. This is shown by its location at the head of the building. Its eastward orientation most likely symbolized the return of Christ from the east. The apse housed the altar, which contained the symbols of the Eucharist.
Like most of the Abila site, the Basilica in area D was in ruins until the 1980’s. Following excavations by Harold Mare, the nave columns and foundation walls of the basilica were reconstructed. Reconstruction of the columns is simply an irregular anastylosis of fallen parts (Figure 17). The outer foundations of the basilica were consolidated by abundant use of concrete and almost had the appearance of a newly built wall. Visitors are not guided through any of these reconstructions by information boards or traces that distinguish the authentic and the reconstructed.

Basilica (Cruciform basilica area E)
The Cruciform Basilica was first rediscovered by Schumacher in the 1880’s (see Figure 18). It was built of limestone walls and basalt columns, and was roughly 24.5 by 18.7 metres in dimension. The Basilica consists of a central chamber, an apse, a narthex, and an adjoining storeroom or small chapel along the north side of the central chamber. It has a cruciform plan and total five aisles (Afanasyeva, 2004).
Figure 18 Plan of the Cruciform Basilica in Area E, Abila. Source: Abila Archaeological Project [2005].

Figure 19 Photograph of the Cruciform Basilica in 1994, Abila. Source: Abila Archaeological Project [2005].

Figure 20 Photograph taken during the process of reconstruction in Cruciform Church in 1996, Abila. Source: Abila Archaeological Project.
After its rediscovery and until 1990’s, the Cruciform Basilica lay in ruins (Figure 19). The excavation team of Harold Mare was first attracted to this area, which later became known as Area E, by a toppled basalt capital and an arched wall, which were both visible prior to excavation. By findings of the excavation, it was indisputably proved that structure was a Byzantine basilica (Abila website).

Shortly after excavations, reconstitution of the column remnants was started. Between 1996-2000 basalt columns of the cruciform basilica were reconstructed under supervision of Mare (Figures 20 & 21). Reconstitution of cruciform basilica resembles reconstruction of 7th century basilica in many aspects. Only columns of the basilica and a small portion of outer walls were reconstituted. Reconstitution is not accompanied by any written or visual information about the reconstruction and as in the case of the 7th century basilica, technical details of the reconstitution was poorly designed and implemented (Figure 22).
3.3. Presenting Reconstructed Archaeological sites for Tourism

Examining the two case studies from the Decapolis cities, Jerash and Abila, show that reconstruction is becoming an integral part of archaeological site presentation in the Decapolis region. It is undeniable that tourism prompts and even pushes reconstruction of cultural heritage in the region. The parallelism of the two is apparent by the timing of the reconstructions that follow tourism development projects in archaeological sites. From a tourism management point of view, it can be said that these reconstructions achieved success by attracting tourists. On the other hand if the long-term sustainability of tourism and preservation of heritage is concerned the practice can be in doubt. Jerash, an impressively reconstructed ancient city, is a typical example. The splendour of the city that is uncovered by reconstructions and other entertainment facilities are attracting significant attention from tourists and local community. However, integrity and proper preservation of the archaeological site are largely disregarded during reconstruction practice. At present (2005), an orthodox understanding of reconstruction and haphazard practice has brought Jerash to the brink of losing its integrity.
Contrary to Jerash, Abila is still largely an unwrapped archaeological site that has witnessed only limited scale of reconstructions. To satisfy both needs of tourism and proper preservation in Abila, national and international experience should be taken into consideration. Jerash is not the only reconstructed site in Decapolis. Pella and Umm Qais have also been in considerable degree reconstructed. Generally, it is possible to perceive a general tendency in these cases to conceive reconstruction as an aim of the preserver, and confine it to an orthodox understanding of the concept. This results in tourism gains in short term but loss of integrity at the archaeological site in the end. Historical development of the reconstruction concept and long practical experience now enables diversity and flexibility in practice that ensures the integrity of heritage sites. Reconstruction has to be conceived as an innovative tool that has to be utilized in the broadest way to present archaeological remains to the public. The further reconstruction activities in Abila have to be based on the fictional implementation of these principles and experiences. The following chapters 4 and 5 deal with the issues surrounding the development of both sustainable and responsible tourism in relation to the Decapolis cities, the nature of tourism impacts and the tools and approaches that can be utilised in tourism planning and management for the integration and analysis of sustainability principles. Chapter 6 will suggest a proposal for Abila while taking sustainability and reconstruction guidelines into consideration.
4. Responsible and Sustainable Tourism Development

The proper management of cultural tourism escorts the conservation and protection community into the realm of sustainable development by placing the preservationists in the position of being able to aid local communities achieve socio-economic benefits including poverty alleviation. Whether this statement is true and whether the economic and political impacts of tourism are positive or adverse for the host nation is open to debate, but important for Jordan. On the one hand, many studies argue that tourism development brings in hard currency, creates jobs, draws investment capital, and can even promote industrial and agricultural development through fostering backward and forward linkages to other sectors of the economy (Ryan, 1991). On the other hand, tourism is also often portrayed as a neo-colonial form of economic exploitation dominated by large trans-national corporations that creates relations of dependency and distorts the local economies it meets (Budowski, 1976; Britton and Clark, 1987). Certainly if the last statement is true, care must be taken concerning Jordan’s fragile economic condition. To answer these questions and more it is appropriate to first consider, the perception of achieving sustainable development and the nature of tourism impacts.

In the 1970’s environmental issues started to gain attention following the Club of Rome proposal that natural limitations impede economic growth. The Bruntland Report, (also known as the “Our Common Future report”), prepared for the 1987 United Nations Environment and Development Summit Conference and the development of an agenda 21 at the Rio conference in 1992, warned that meetings needs of our generations should not hamper the abilities of future generations to meet their own need. This was the emphasis and starting point for the concept of sustainable development, later defined by Shaw and Williams (1994) as a balancing act between humanity’s needs and nature’s finite resources. To be successful, it requires a unified effort on a
country-by-country basis, with individual action tailored to each nation’s specific environmental concerns and development challenges. In this respect tourism is required to be developed in the Decapolis region of Northern Jordan in ways that benefit the economy without damaging local heritage. For this reason, it is important to address the individual elements of sustainable development that could be considered and incorporated into a structured development or management plan for the Decapolis sites.

The ideal sustainable development situation would be a project that combines socio-economic and tourism development with environmental protection. A project involving people at the local level insures that they are invested in these new developments on the unique archaeological sites; tourism then becomes a powerful tool for social and economic development; in this sense, the local people are classed as stockholders in the site. This incorporation aids the mitigation of vandalism and destruction that far too often can occur in developing countries such as Jordan, following the opening of archaeological sites to the public. In addition, the engagement of the local population indeed helps them identify the long-term benefits and view of their role in the community (Burns, 1995).

Ryan (1991) highlights a circular and cumulative relationship between tourism development, the environment and socio-economic development—most tourism developments place additional pressure on the cultural and environmental resource base, thereby compromising the future prospects of the local population. Therefore the crucial issue of sustainability applies to both hosts and guests as far as tourism development is concerned. The destruction of tourism resources for short-term gain will deny the benefits to be gained from the mobilisation of those resources in the future. The requirements to achieve sustainable tourism therefore depends on (a) meeting the needs of the host population in terms of improved standards of living in the short and long term and (b) satisfying the demands of increasing numbers of tourists and continuing to attract them to achieve this and (c)
safeguarding the natural and cultural environment to achieve the two foregoing aims (Jameson, 1997).

For the needs of the local population, they must be involved in tourism development if their needs are to be met. This involves the four major considerations, ownership, scale, timing, and location. Ownership is important especially in the case of less developed countries such as Jordan, where there has often been the case that the host countries themselves only receive a small return of the exploitation of an increasing scarce resource; their natural and cultural environment. In addition the costs the host country is then forced to bear, both in terms of cultural and environmental degradation, would undoubtedly make later sustainability, conservative and restorative measure unaffordable in the case of Jordan. The scale of tourism development is also a complex issue. Small scale projects, locally controlled, can have a significant impact on raising living standards (Britton and Clake, 1987) but are at the same time unable to meet the needs of large numbers of tourists. Therefore government planners should co-ordinate investment in infrastructure with the needs of small-scale entrepreneurs and the needs of the local communities, paying careful attention to the environmental and cultural components.

There appear to exist many contradictions concerning the ownership, scale, timing and location of tourism development. It is not as simple as resolving the issues of the indigenous versus foreign, small versus large, gradual versus instantaneous and dispersed versus concentrated projects. It is more of question of ensuring complementarily between all issues, so that development can contribute towards the development of areas, while minimising the adverse environmental, social and economic effects to ensure sustainability. Simply, environmental and cultural erosion will not occur if it is possible to make more money via conservation efforts. Since sustainable approaches to tourism are among attempts to manage the deleterious
impacts, a brief review of the adverse costs and benefits is also necessary (Figure 23 overleaf).
### Figure 23 Table: The Impacts of Tourism Development of the Host Country

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Cultural Impacts</th>
<th>Social Impacts</th>
<th>Environmental Impacts</th>
<th>Economic Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Identification, conservation/ restoration of monuments</td>
<td>1- Tourist gain through relaxation and recreation, a change of environment and social contract with others.</td>
<td>1- Conservation of natural areas and wildlife</td>
<td>1- Financial</td>
<td></td>
</tr>
<tr>
<td>2- Renaissance and/or retention of:</td>
<td>2- Locals gain through:</td>
<td>2- Environmental appreciation</td>
<td>- Foreign exchange earnings</td>
<td></td>
</tr>
<tr>
<td>• Art</td>
<td>• Impetus to modernisation</td>
<td></td>
<td>- GNP</td>
<td></td>
</tr>
<tr>
<td>• Handicrafts</td>
<td>• Women given a level of independence</td>
<td></td>
<td>- State taxes</td>
<td></td>
</tr>
<tr>
<td>• Dance</td>
<td>• People break out of traditional restrictive roles</td>
<td></td>
<td>- Income: businesses &amp; individuals</td>
<td></td>
</tr>
<tr>
<td>• Ceremonies</td>
<td></td>
<td></td>
<td>- Creates jobs</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>3- Rehabilitation and often transformation of old buildings and sites into new facilities</td>
<td>3- Development</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Broadens economic base</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4- Introduction of planning and management</td>
<td>- Inter-sector linkages can occur</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Multiplier effects</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Encourages entrepreneurialism</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Infrastructural provision</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>- Improvement of social services</td>
<td></td>
</tr>
</tbody>
</table>
### Development of the Host Country

| Source: Mathieson & Wall (1982) | • Promotes regional development in underdeveloped areas |

Figure 23
Table: The Impacts of Tourism
<table>
<thead>
<tr>
<th>Cultural Impacts</th>
<th>Social Impacts</th>
<th>Environmental Impacts</th>
<th>Economic Impacts</th>
</tr>
</thead>
<tbody>
<tr>
<td>1- Disappearance, degradation or commoditisation leading to a loss of authenticity of:</td>
<td>1- Local resentment resulting from the demonstration effect.</td>
<td>1- Energy costs of transport</td>
<td>1- Financial</td>
</tr>
<tr>
<td>• Art and music</td>
<td>2- Moral problems:</td>
<td>2- Loss of aesthetic value</td>
<td>• Leakages: imports, repatriation of profits</td>
</tr>
<tr>
<td>• Handicrafts</td>
<td>• Crime</td>
<td>3- Noise</td>
<td>• Opportunity costs</td>
</tr>
<tr>
<td>• Dance</td>
<td>• Prostitution</td>
<td>4- Air pollution</td>
<td>• Inflation</td>
</tr>
<tr>
<td>• Ceremonies</td>
<td>• Gambling</td>
<td>5- Increased water demand</td>
<td>• Higher land prices</td>
</tr>
<tr>
<td>• Architecture</td>
<td>• Decline of traditional beliefs and religion</td>
<td>Water pollution and the generation of waste</td>
<td>•</td>
</tr>
<tr>
<td>• Dress</td>
<td>3- Health problems, e.g. AIDS</td>
<td>6- Disruption of animal breeding patterns and habitats</td>
<td>2- Employment</td>
</tr>
<tr>
<td>• food</td>
<td></td>
<td>7- Change of landscape-homogenising of landscape, permanent environmental restructuring</td>
<td>• Often part-time</td>
</tr>
<tr>
<td>2- Strains on local hospitality become intolerable</td>
<td></td>
<td></td>
<td>• Low paid</td>
</tr>
<tr>
<td>3- Employment in tourism can be dehumanising</td>
<td></td>
<td></td>
<td>• Low skilled (expatriate non-locals often occupy more skilled positions)</td>
</tr>
<tr>
<td>4- Adverse effects on family and community life</td>
<td></td>
<td></td>
<td>• Seasonal</td>
</tr>
<tr>
<td>5-</td>
<td></td>
<td></td>
<td>• For women</td>
</tr>
<tr>
<td>6-</td>
<td></td>
<td></td>
<td>• May take other employee from other sectors</td>
</tr>
</tbody>
</table>

- Costs
Table: The Impacts of Tourism Development of the Host Country cont.

<table>
<thead>
<tr>
<th>Source: Mathieson &amp; Wall (1982)</th>
<th>7- Neo-colonialism</th>
<th>8- Seasonal effects on population densities and structures.</th>
<th>Dangers of dependency and neo-colonialism with foreign/ownership.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8- Unbalanced population structures</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Tourism Development of the Host Country cont.
It has been suggested that it is not difficult to make the case that tourism has the potential to be damaging to the environment (Ryan, 1991). Few developments are sacrosanct and it can be argued that adverse environmental impacts can occur in the greenest of projects. However while emphasis is frequently laid on the negative effects of tourism on the natural and man made environment, it must be noted as can be seen in the previous Figure that benefits can also occur. Many authors suggest that it is the intensity of impacts and not their individual nature that alters the destination (Ryan, 1991; Shaw and Williams, 1994; Burns and Holden, 1995).

It has also been suggested that the destination characteristics greatly influence the intensity of these impacts depending on the size of the destination, the scale or rate of tourism development, the number of tourists, the fragility of the environment, the political environment, the sensitively of development in relation to the local environment and culture, development incentives, social and cultural attitudes of the local people, the types of tourists, competition for other areas, accessibility from the main generating regions, both physical and economic accessibility, degree of foreign ownership, employment of non indigenous labour, government provision of infrastructure, nature and attractiveness of tourist facilities, level of economic development and whether the area is urban or rural (Mathieson and Wall, 1982).

It is evident that not only has tourism grown rapidly, but many of those concerned about its adverse impacts at the destination assume that mass forms of tourism are largely responsible for these problems. It has therefore been previously suggested that controlling the volume of tourists might alleviate the situation (Wheeller, 1990) especially since tourism is usually found in locations with fragile environments. The increased interest in so-called alternative forms of tourism is therefore perceived as one of the responses to the emphasis placed on exploitation associated with mass tourism, especially in developing countries such as Jordan. Ryan (1991) states that renewed
Concern with environmental ethics, has focused on the deleterious effects of mass tourism as it impinges on important and fragile natural environments. This has ultimately lead to the emergence of more sensitive forms of tourism, in which the aim is to minimize the environmental, social, cultural and economic adverse costs and maximise the benefits. In the literature it has been label under a number of various titles namely –appropriate, responsible, soft, green – but perhaps the must useful is alternative tourism since it is pursued as an ‘alternative’ to conventional ‘mass’ tourism and its associated negative impacts (Wheeller, 1990).

The major characteristics of alternative tourism are shown in Figure 24 overleaf. In relation to alternative tourism and the development of the Decapolis sites small numbers of individual travellers are preferred to a high magnitude of tourists, who are often in groups. Locally provided accommodation and decision making would encourage slow, but controlled growth that lies within the capacity of the region to absorb, without damage to its cultural or natural environment. These factors contrast with the rapid pace of large scale development often favoured by multinational companies and which overwhelms the destination and resultanty leads to soaring costs, as can be seen in and around Petra (Shoup, 1985). Inevitably this polarization masks a continuum in reality, along which a number of variants can be identified. An attempt to clarify is made diagrammatically in the table below, which shows the major types of tourism and their variants.
<table>
<thead>
<tr>
<th>Mass</th>
<th>Alternative</th>
<th>Sustainable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tourist</td>
<td>Traveller</td>
<td></td>
</tr>
<tr>
<td>Large Firms</td>
<td>Independent, specific Operators</td>
<td></td>
</tr>
<tr>
<td>Large-scale</td>
<td>Small-scale</td>
<td>Appropriate scale</td>
</tr>
<tr>
<td>Multinational hotel</td>
<td>Small-scale accommodation</td>
<td>Planned – pace may be irrelevant</td>
</tr>
<tr>
<td>chain</td>
<td>Slow and controlled development</td>
<td>Local decision making</td>
</tr>
<tr>
<td>Rapid development</td>
<td>Local decision making</td>
<td>Growth at agreed cost</td>
</tr>
<tr>
<td>often without planning</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multinational decision making</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effects ignored i.e.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>impacts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuel effective transport</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Space efficient</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Figure 24** (above) Table displaying the major characteristics of alternative tourism. Source: Wheeller, (1990).

**Figure 25:** Major types of tourism and their variants. Source: adapted from Burns and Holden, (1995).
Characteristics

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adventure tourism</td>
<td>Attracts mainly allocentric and mid-centric tourists. Usually resource based. Involves physical challenge, education and contact with nature. Can be small scale with many ecotourism characteristics, medium-scale and sports orientation or large scale with aspects of mass tourism.</td>
</tr>
<tr>
<td>Nature tourism</td>
<td>An aspect of adventure tourism where the focus is upon the study or observation of flora, fauna and/or landscape. It tends towards small scale, but can become mass or incipient mass tourism in many national parks. It is sometimes perceived as synonymous with ecotourism since one of its aims is to protect natural areas.</td>
</tr>
<tr>
<td>Community tourism</td>
<td>A type of tourism run by and for the local community. It may be alternative in character or may cater for larger numbers and have more in common with aspects of mass tourism as in some heritage museums and farm tourism which can be associated with organised packages and even coach travel.</td>
</tr>
</tbody>
</table>

**Figure 26** Variants of alternative tourism and their characteristics. Source: adapted from Burns and Holden, (1995).

Sustainability as a concept involves a number of different strands (Budowski, 1976). Environmental, ecological and economic factors assume that it is applicable in the technical sciences, whereas social and political factors relate to power and values. Within these strands, questions of scale, family, community, region, and timescale, project life, and so on, are critical elements. In a very narrow sense ecological sustainability can be achieved by excluding or restricting people from particular vulnerable areas. In development or social terms, however such an approach could be catastrophic. A less extreme possibility would permit small numbers to benefit, while still achieving a relatively high degree of ecological sustainability. A different view of sustainability, with a political and economic stance, can be seen in notions like equity and the reduction of poverty alongside ecological maintenance. This balance is difficult to achieve because it contains contradictions. The challenge is a compromise between ecological sustainability and sustainable lifestyles for the majority of the population,
including underprivileged groups such as the poor, the elderly, women and ethnic and religious minorities.

Shaw and Williams (1994), state that the only realistic approach to agree priorities. If the main agreed aim for the development for the Decapolis region is to satisfy the needs of tourists, then the needs of others are of lesser importance. Conversely, if the conservation of the physical/cultural environment is of paramount concern, then the needs of people – both tourists and local inhabitants at the destination are relatively unimportant. Conversely the principle focus could be the improvement of the circumstances of the disadvantaged and powerless, which are likely to lose through the actions of market forces. It is likely that at different stages destination countries and/or areas may vary their priorities.

Burns and Holden (1995) highlighted the number of possible strategic approaches in the search of sustainable tourism. In Figure 27 (below) situation (1) could be demonstrated by small numbers of tourists who visited a remote area, thereby gaining a high level of satisfaction from their visit and leaving their destination relatively unchanged. If such a visit is organised and operated by an external company, perhaps a multinational, or by one or more members of a local elite, then benefits are unlikely to filter down to the local community and therefore will not improve the quality of life of those in most need. Expeditions and specialised packages holidays, like small-scale safaris, typically satisfy these criteria. A small-scale local guest house could illustrate situation (2). It would provide accommodation within a physical and social environment that has been modified relatively little. The standard comfort provided for tourists is likely to be low, however, rendering demand minimal. Nevertheless, the original environment is preserved and any economic benefits that do accrue will go directly to the local community.

Situation (3) could occur when a large tourism enterprise employs many local people. Not all members of the local community will obtain jobs and the majority of the employment is likely to be unskilled, but work is made available
to those who otherwise maybe unemployed. A large enterprise such as this may well satisfy certain types of tourists but, in the process, may irreparably damage the environment. Compromise is the essence of situation (4). Small-scale, locally managed tourism enterprises that may spread the benefits more widely through the community are the best example.

![Figure 27 Strategic approaches to sustainable tourism. Source: adapted from Burns and Holden, (1995).](image)

The various approaches to sustainable development inevitable lead to confusion and, as Burns and Holden (1995) suggest, those involved in tourism will not automatically benefit from the application of the sustainable principles that are frequently identified as the panacea for the industry. While the question of the role of the tourist within sustainable development is interesting, and perhaps too infrequently addressed, the role of sustainable development with tourism is widely acknowledged but imperfectly understood (Croall, 1995). Figure 28 below, displays the relationship between the magnitude of tourism, the associated perceptions of tourism and actual impacts by the host population.
In 1991, the United Kingdom’s Department of the Environment developed and published guiding principles for sustainable tourism development; these are axiomatic and are as follows (pp 15).

- The environment has an intrinsic value which outweighs its value as a tourist asset. Its enjoyment by future generations and its long-term survival must not be prejudiced by short-term considerations.
- Tourism should be recognised as a positive activity with the potential to benefit the community and the place as well as the visitor.
- The relationship between tourism and the environment must be management so that the environment is sustainable in the long term. Tourism must not be allowed to damage the resource, prejudice its future enjoyment or bring unacceptable impacts.
- Tourism activities and developments should respect the scale, nature and character in which they are sited.
- In any location, harmony must be sought between the needs of the visitor, the place and the host community.
In a dynamic world some change is inevitable and change can often be beneficial. Adaptation to change however should not be at the expense of any of these principles.

The tourism industry, local authorities and environmental agencies all have a duty to respect the above principles and to work together to achieve their practical realisation.

Central to the implementation of these principles is that consideration be given to the model shown in Figure 29 in the development process (Burns and Holden, 1995). The emphasis of the model is the movement towards integration of the physical environment (place), the cultural environment (host community and the tourist). The implication is that in the future planning of tourism in the Decapolis region as a whole and individual sites respectively, there greater need to be made to incorporate community representation into the planning process (although as is often the case, great difficulties may be experienced in defining the true meaning of community because of its diversity and the complexity of social construction) and achieving universal agreement of such wide representation of interests may be difficult.

Figure 29 Model for sustainable tourism. Source: Burns and Holden (1995).
One area within Jordan that seems to comprise of most of the components for sustainable tourism development is that of the Dana Nature Reserve. The reserve is run by the Jordanian Royal Society for the Conservation of Nature (RSCN), and is a well published model for the integrated development and conservation, and may help provide insight for the further development of the Decapolis region. In addition to the wildlife, Dana is abundant with archaeological sites, including ancient copper mines. Ecotourism activities in the reserve are in synergy with the socio-economic projects that help improve living standards and create work opportunities for the local inhabitants (Irani and Johnson, 1998). Income generating schemes integrated into the reserve include, organically produced agricultural products and dried health fruits, medicinal herbs as cash crops in terraced gardens; and the revamping of a fledgling jewellery-making initiative.

The ecotourism activities at the reserve are a tool for conservation efforts. While creating employment for the local community around the reserves, the community in turn become to appreciate the resources and they work to protect them. Irani and Johnson (1998) state that while the objective of the Dana Reserve was primarily the preservation of biodiversity at the outset, as part of the project, the RSCN developed a tourism unit which built a low-impact camp site with tents, a guest house, and a number of walking trails. The objective of this project was to generate income and jobs for the local community including people displaced or who had their livelihoods impinged upon by the establishment of the nature reserve on their grazing land. After a few years of operation the tourism unit has steadily increased its self-generated income stream to the point of covering 100 percent of the reserve’s running costs. Critical to the project’s success was the institutional capacity building efforts which established procedures for task design, implementation, and evaluation. Underpinning the whole process and valuable in reference to the future development of the Decapolis region, has been the societal agreement to work together, local villagers, government departments, tourism and other business concerns, scientific and
conservation institutions and other bodies, ensuring that the benefits derived from the use of natural resources are equitably shared with the stakeholders.
5- Tools for sustainability analysis in planning and managing tourism

Tourism at its best is an enriching experience for the visitor. It has the potential benefit for heritage sites, provide employment, income and other benefits for host communities in Jordan. As previously mentioned sustainable tourism and the elements of sustainable development are key to seeking a more productive and harmonious relationship between the three elements of visitor, host community and environment. This however is not a static relationship, and indeed achieving harmony is dependant on the ability to accept, absorb and adapt to change, which may be of varying temporal and spatial scales, expected or unexpected. This section deals with the approaches and the tools that have the potential to deal with the sustainable tourism planning and management issues that may arise in the promotion of the Decapolis region as a tourist destination.

There have been calls to assure that tourism is planned and operated within the context of sustainable development principles. While definitions of sustainable developments are plentiful, the ‘how to apply’ are less frequently discussed in the literature. In the context of the Decapolis sites, there is a requirement for practical tools to help implement approaches to sustainable development. One of the approaches regularly advocated is determining the carrying capacity of a site. Other tools include environmental impact assessment (EIA), limits to acceptable change (LAC), visitor impact management (VIM) and visitor experience and resource protection (VERP). These tools, (see Figure 30 overleaf.) which can be said to work in the interface between, social, economic and environmental goals, are discussed below, together with their strengths and limitations (Wight, 1994).
1- Carrying Capacity

Carrying capacity is a term borrowed from wildlife ecology, with the precise meaning of ‘the maximal population size of a given species that an area can support without reducing its ability to support the same species in the future (Ashmore et al. 1999). Carrying capacity has been applied to land use planning and growth management, and other aspects of human activity. Planners have enlarged the definition of carrying capacity to include the many variables inherent in man-made systems. Shelby and Heberlein (1994) subdivided carrying capacity into ecological capacity (ecological parameters); physical capacity (space parameters); facility capacity (development parameters); and social capacity (experience parameters).

A major problem in the carrying capacity literature however, is that impact and evaluation often become confused. An example is the concept of resource base damage. All human use has an impact, but whether this impact is negative of positive relies on a value judgement that the impact exceeds some given standard. A change in the cultural or natural environment may occur but whether it is negative depends on management objectives, expert judgements and the broader public values as a whole. Thus determining the carrying capacity of a site ultimately requires the determination and consideration of human values. In addition because of the often subjectivity of these values it is essential that managers carryout active dialogues with all involved and effected stakeholders.
Tourism carrying capacity is frequently mentioned as one method of controlling the direction and consequences of development. Unfortunately, carrying capacity as a guiding concept has experienced limited success outside the field of wildlife management and has problems dealing with the complexities and diversity of issues associated with tourism and recreation (Wight, 1994).

2- Use Levels

If carrying capacity is defined as the level of use beyond which impacts exceed acceptable levels specified by evaluative standards, it identifies a magnitude for one management parameter, that of the use level. It also assumes a fixed and known relationship between the use level and impact parameters. Hence capacity will change if other management parameters alter that relationship. Capacity will therefore change if management
objectives change or if tourism magnitudes change radically. Wight (1994) also writes that there is little evidence that simply lowering or raising a specific carrying capacity standard will bring about predictable changes in relationship to the impact. Therefore it is difficult to establish a predictable linkage between use levels and impact. An additional problem is that it is often tempting to expand the limits.

The main value or strength of the carrying capacity concept may therefore be the concept itself: as a way of thinking in regard to planning, carrying capacity is useful. It focuses attention on the ability of the natural and cultural environment to support development. It suggests that development should respect the functioning of the natural process of the environmental and it shows that natural processes and anthropogenic systems can have positive or adverse effects, or both (Schneider et al. 1978).

Recent literature has increasingly adjusted the perspectives and definitions of carrying capacity, identifying it as a management system directed towards the maintenance or restoration of ecological and social conditions defined as acceptable and appropriate to the area under management objectives, not a system directed towards the manipulation of use levels. There are numerous strategies and tactics for managing tourism and recreation use, and although limits certainly constitute a legitimate management tool, undue emphasis on carrying capacity may lead to the narrowing of management polices based on rationing and use regulations (English Tourist Broad, 1991). So far carrying capacity has not proved a useful, practical tool for sustainability analysis.

3- Environmental Impact Assessment

Environmental impact assessment (EIA) has been an important planning tool for many decades now (Grasson et al., 1999; Petts, 1999; Woods, 2003). The concept has evolved to become environmental assessment and management, in recognition that it is not only a tool but also a process. EIAs
identify ways of improving projects environmentally, and preventing, minimising, mitigating or compensating for adverse impacts. EIA is a major operational tool to approach sustainability at the project level currently available, identifying the exact nature of individual impacts (Goodland et al 1992). EIA should be an integral part of the planning process, and should begin when project planning begins, not after fundamental decisions have already been taken, and when there is only an opportunity to modify the fine details of the project. While EIA is still largely concerned with the analysis and management of impacts on the environmental and social systems caused by a single project development, overtime it has become scientifically more rigorous, and its scope has gradually expanded to include: social, economic, cultural and other non-biophysical environmental concerns. It has also expanded to include programmes and polices, to become Strategic environment assessment (SEA), as well as specific projects and cumulative effects. However, EIA has rarely integrated environmental, social and economic issues successfully.

4-Cumulative Effects Assessment
The term cumulative effects assessment (CEA) carries different connotations. It can refer to the effects associated with single projects or to the cumulative effects of a multitude of developments/process, and their associated compounding effects. Ross (1994) defines CEA as an impact on the environment that results from the incremental impact of the action under review when added to other past, present, and reasonably foreseeable future actions. Cumulative impacts can result from individually minor but collectively significant actions taking pace over a period of time. Environmental assessment is a tool in environmental management, not an end in itself. EIA alone cannot make a development sustainable, but can help provide directions towards sustainability for project managers, resource manages and policy makers.
However, EIAs currently undertaken fail to take sufficient account of all factors pertinent to development decision making. While project specific EIAs are often limited in terms of time, space, or policy context, most significantly, they usually fail to relate project costs and benefits to broad social goals. Petts (1999) states, that such short comings result largely from the fact that EIAs tend to be reactive rather than proactive and that within the context of environmental management, development must be environmentally and socially sustainable. Therefore, broad social goals are required to provide the framework within which to formulate and assess development strategies and programmes. These goals must take account of sustainable resource use, and continuing environmental quality, and community preferences related to the benefits of developments (Wood, 2003).

Although the introduction of SEA, with its polices, plans and programmes has proved to be a useful tool for achieving sustainable development, it is not the perfect tool many experts claimed George, (1999). Focusing on the higher levels of decision-making, the term environment was extended to include the both the social and cultural environment. In practice however it still suffers for many of the same limitations of EIA, especially regarding the question of, how to predict the sustainable impact of a policy of plan? In the future three key areas that can help advance EIA and SEA in the direction of sustainability assessment are, the consideration of cumulative effects, extended time and space frameworks for impact analysis and the integration of policy and project appraisal (Devuyst, 1999). CEA may help forge a transition from project specific environmental management to a more comprehensive holistic approach to the environmental.

5- Limits of Acceptable Change

Limits of acceptable change (LAC) have been proposed as an overall framework for addressing the issues of managing impacts and ensuring quality recreation experiences. LAC is a planning procedure designed to identify preferred resource and social environmental conditions in a given
recreational areas and to guide the development of management techniques to achieve and protect those conditions (Wight, 1994). It emphasises identification of the objectives of a specific site and the development of management techniques to achieve those objectives. The procedure specifies the acceptable environmental conditions of an area, having regard to the social, economic and environmental values, its tourist potential and other management considerations (Figure 31). Indicators of resource and social conditions are developed, actions for achieving acceptable standards are identified by managing authorities, and performance against standards is then regularly assessed. Indicators relate to the state of the resource, as well as to the nature of the experience of both local stakeholders and tourists. Once desired conditions have been identified it is the management aim to maintain or restore those conditions. Public involvement is therefore a critical component of the LAC model, also in planning visitor use, and in monitoring that use, the system provides objective measures against which to monitor visitation/usage impacts and take remedial action.

<table>
<thead>
<tr>
<th>Limits of Acceptable Change (LAC)</th>
<th>Visitor Impact Management (VIM)</th>
<th>Visitor Experience &amp; Resource Protection (VERP)</th>
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<tr>
<td><strong>Initiate and identify issues</strong></td>
<td>1- Preassessment data base review</td>
<td>1- Assemble the project team</td>
</tr>
<tr>
<td>Goals</td>
<td>2- Review management objectives</td>
<td>2- Develop statements of purpose, significance and primary interpretive themes</td>
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<td>Standards and indicators</td>
<td>3- Section of key impact indicators</td>
<td>3- Map and analyse resource and visitor experiences</td>
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<tr>
<td>3- Select indicators of resource and social conditions</td>
<td>4- Selection of standards for key impact indicators</td>
<td>4- Establish the spectrum of desired resource and social conditions</td>
</tr>
<tr>
<td>Inventory and evaluation</td>
<td></td>
<td>5- Use zoning to identify proposed plan and alternatives</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6- Select quality indicators and specify associated</td>
</tr>
</tbody>
</table>
In following the LAC process, a manager must undertake four basic tasks: (1) identify acceptable and achievable social and resource characteristics of the area being managed, (2) analyse the relationship between the existing conditions and those desired, (3) identify a series of possible management actions that will achieve the desired conditions; and (4) develop an environmental monitoring and evaluation procedure to measure the effectiveness of the management actions undertaken. What has most potential however is the approach (see Figure 32 below) and the principles of LAC, not necessary the specifics of the process.
The LAC system also has its limitations. Unless detailed ecological information exists for each site, the standards adopted will be arbitrary. In addition, in order to attract visitation to an area, some authorities may choose lower standards than are necessary to maintain the long-term environmental and cultural integrity of an area. LAC for specific sites does not appear to consider the cumulative effects of tourism and recreation activities in surrounding areas. Also as practised to date, LAC does not consider whether tourism development offers the wisest use of the environmental and cultural resources of an area.

6- Visitor Impact Management

The visitor impact management (VIM) approach is used to assess the impacts of visitors on a resource and recreation experience. It involves the systematic collection of data to predict the impacts of differing management strategies, and the collection of management information on the desirability of identified alternatives. VIM uses a sequential process, which aims to reduce or control the impacts that threaten the quality of outdoor recreation and tourism sites and experiences. There are eight steps in the VIM planning process (see Figure 31). VIM requires two separate elements: description (of the relationship between specific conditions of use and the impacts associated with these conditions) and evaluation (of the acceptability of various impacts). VIM therefore helps to address three issues inherent in impact management (Shaw and Williams, 1994).

1. Identification of problems conditions of unacceptable visitor impacts (e.g. conflicts between stakeholders using the resource);
2. determination of potential causal factors affecting the occurrence and the severity of unacceptable impacts; and
3. selection of potential management strategies to address the unacceptable conditions.
In addition to assisting with such issues, VIM can be integrated with other planning frameworks, or used as a management tool for a specific local impact problem. It may also be adapted for use in situations of mass tourism and in urban areas (English tourist broad, 1991). Graefe et al. (1990) suggested that visitor management may be direct (regulate or restrict visitor activities) or (indirect (influence visitor behaviour). Limiting use, rationing use and restricting use are only a number of strategies; others include physical alteration, information dispersal, economic constraints, enforcement and zoning.

7- Visitor Experience and Resource Protection

Another tool that may be of support in the development of the Decapolis sites is visitor experience and resource protection (VERP) looks at the desired natural and social conditions rather than the magnitude of tourists. The idea is to provide a measure of the appropriate conditions, rather than a measure of the maximum sustainable use. The VERP process consists of nine steps. In many respects it resembles the approaches of LAC and VIM. However, VERP is intended for use throughout the site. Like LAC and VIM, VERP also takes the approach that management goals must be translated into measurable management objectives by using indicators and standards. VERP users have correctly noted that use patterns, desired experiences, natural resources and management all change over time and thus, long-term monitoring is an essential component (Shaw and Williams, 1994).

Considering the key requirements for any sustainability tool, there are a number of similarities in the approaches taken by LAC, VIM and VERP (see Figure 31). The review of their key characteristics reveals a number of elements that should be built into a potential tool to be utilised in the development of sustainable tourism in the Decapolis region. These include ecological sustainable development, public involvement, section and intersectional conflict resolution, integrated resource management, social values and ethics, indicators, scale and monitoring. Ecological integrity is only
one of many factors that are necessary for sustainable development, particularly if it is to be fair and equitable. However unlike some other factors, ecological integrity is absolutely necessary from the outset (Wight, 1990). Sustainability is more than a biophysical concept; it also involves social-economic equity. Decisions making therefore should integrate long- and short-term economic, environmental, and social and equity considerations.

In addition a broader, more balanced approach to the planning and promotion of tourism needs to recognise the views of tourists and developers, and the local and wider community. As the successor document to the World Conservation Strategy states “for community-based environmental management to succeed, environmental, social and economic objectives must be integrated and pursued with the full participation of the affected groups and individuals” (World Conservation Union et al. 1990, pp 32). Developers in the Decapolis region should therefore take into account the local community attitudes and feelings, including the way that a local unaltered environment contributes to a community’s sense of place. Public participation by community stakeholders in the tourism planning is fundamental and prevents narrow special interest groups from dictating the development process, thus a transparent approach with wide stakeholder participation throughout and continuing after development is essential.

Many techniques for public participation are available: the challenge is to obtain meaningful stakeholder feedback (Wood, 2003) and involvement on all issues, as well as effective representation. In this respect developers should seek common interests and seek solutions that are both acceptable and capable of implementation. This approach requires both a collaborative approach to problem solving and conflict resolution.

Furthermore, integrated resource management is a fundamental precept for sustainable development. There needs to be a consideration of all values, whether ecological, economical cultural or social and the effects of uses on
those values in decision making. Also important are the integration of the
effects of management activities within government agencies, and the
integration between these agencies and community and industrial groups.
The prioritisation of users needs to be designated, and the interpreted
resource management approach requires recognition of the regional
dimension of use and the full spectrum of opportunity that the Decapolis
region can supply.

In the case of indicators, whether they emerge from social, ecological or
economic theory, the way the decision process incorporates them can
influence overall policy. Indicators are only useful in the context of an
appropriately framed question (Wight, 1990). When selecting indicators it is
important to have a clear understanding of the management goals of which
LAC, VIM or VERP may aid. Suitable indicators may include: environmental
and social indicators (measuring changes in the state of the environment and
society); sustainability indicators (measuring distance between the present
and a sustainable state of the environment); and sustainable development
indicators (measuring progress to the broader goal of sustainable
development). However there is a tendency to select indicators that are
easy to measure and reflect the most visible changes, hence important issue
may be dropped or overlooked.

Determining the resolution of a study, both spatially and temporally, is also a
challenge for many sustainability tools and approaches. Scales must be
appropriate to the question being asked or the area of concern. The level of
spatial resolution suitable for a detailed understanding of a small area may
require considerable input data. Temporal scale is also an issue, either static
or dynamic. The concept of sustainability itself does not imply a static
relationship between the various components of visitor, host community and
the environment. Achieving harmony is dependent on the ability to absorb
and adapt to change whether expected or unexpected. Thus policy
frameworks of the region should be fundamentally adaptive. At present
however, monitoring agencies tend to assume that if all goes well initially, activities are within the systems capabilities. However this is not the case and constraints require periodic review; monitoring is therefore intrinsic to any sustainability tool.

The EIA process, in part, establishes mitigation and management systems to control adverse impacts. If these systems are to be effective, then the monitoring programme must be effective. Monitoring is also important to deal with unforeseen changes, which assists in adaptation and reflects the degree of resilience of the system (Petts, 1999).

Chapter Summary
In conclusion, previously approaches have tried to determine the carrying capacity of a site; however as has been seen this approach has a very limited sphere of application. While reducing usage is certainly an appropriate strategy for certain sites or in certain situations, carrying capacity is only one of many tactics within this strategy. Other tools or approaches such as EIA, LAC, VIM and VERP, may offer a more practical and flexible application, focusing not only on managing the use, but also on managing the resource, managing the visitor, and managing the impact.

While all the tools and approaches have their associated limitations. CEA is useful for extending the conventional EIA from the common project level to a wider scale and should follow projects through their entire life cycle. Similarly, LAC, VIM and VERP should also not be once-only tools. Common to all approaches is the ongoing public participation in management and monitoring process. All the tools mentioned above have evolved over time, and will continue to do so, but a combined effort is required among social scientists, economists and ecologists to develop additional tools and indicators further to accommodate a range of cross disciplinary indicators and a variety of scales in order to help integrated analysis.
None of the tools noted above should be seen as a one stop solution for tourism and resource management planning and its associated problems in the development Decapolis region. However they should be seen by the Jordanian tourism board, Department of Antiquities, local authorities and Governmental agencies to provide a valuable frameworks within which decisions can be made regarding acceptable levels, conditions, priorities and resource management in a regional or more site specific context.
6. Development Proposal for Abila

An overall glance at the archaeological site of Abila in the previous “Reconstruction Practice in Decapolis Sites” Chapter shows that it is still largely untouched. Although considerable amounts of archaeological work have been conducted, the appearance of Abila hasn’t decisively changed since it was rediscovered. Reconstructions at the site have been simply the anastylosis of columns. They are subject to criticism but, due to their small scale, they do not constitute a serious or negative step in the site development of Abila.

A wider glance at the site highlights the cultural landscape of the ancient city. Although agriculture was a main reason behind Abila’s prosperity in the ancient times, nowadays the landscape is deserted, except for some small dwellings scattered on the landscape. The exact reason for the abandonment of the city is not yet clear. However, an ongoing joint research project (by Brandenburg Technical University and Yarmouk University) continues to investigate whether the cause for abandonment in the region, including other Decapolis sites is related to desertification (Lucke, 2002). Whether or not desertification was the main reason behind the settlement shift, it is undoubted that the cultivation pattern has been changed in the area. The landscape of Abila, which was covered with vineyards, orchards and fields in ancient times, is mostly now wasteland. Despite this, the local landscape still offers spectacular scenes.

Wadi Qweilbeh, which lies just to the east of Abila, is an impressive narrow valley with ancient rock hewn tombs and natural vista (see Figure 33 overleaf). It is an 8 km long valley running in a north-south direction, with an average width of 80-100 meters. The appearance of the valley dramatically changes in seasons. By summer, an impressive contrast between the riverbed and the adjacent valley emerges. The lush green orchard in the riverbed sharply
distinguishes itself from the yellowish and stony sandstone hilly backdrop. Like a green stream along the valley, it creates a remarkable and intriguing vista in the otherwise dry landscape. The spring at the south end of the wadi enables the riverbed to remain green during dry seasons.

In ancient times, water channels were also in use. Although unused and partially damaged or filled, the channels with their lines of ventilation chimneys are still traceable. There are several rock-hewn water channels in the area with an approximate cross-section of 80x200 centimetres. They were part of a complex irrigation system, which was crucial for farming in a dry climate. With these channels water was carried to farming fields (Lucke, 2002).

![Figure 33](image-url)  
*Figure 33. Photograph of the Wadi Qweilbeh Valley looking North, note the ruins of Abila in the distance. (middle left).*

In addition to the continuously unearthed archaeological remains at Abila, ancient rock-hewn tombs of Byzantine and Roman periods are scattered
along the slopes of the wadi. At present, 21 tombs have been uncovered. Just five minutes away from Abila by walking, the valley and tombs can be considered part of the archaeological site. It is thought that the rock hewn tombs had been the necropolis of the city in Roman and Byzantine era. The interior of tombs are richly ornamented with coloured frescos, which are constituted of geometric patterns, or portraits of the buried deceased. The decoration of the tombs sometimes includes stone-hewn doors. Stone sarcophagi has also been found in several tombs. As a whole the rock-hewn tombs display Abila’s once splendour as well as its burial culture.

![Figure 34](photograph.jpg) 

Figure 34 Photograph of the inside a hewn tomb, Abila.  
Source: Afanasyeva (2004).

However, the present condition of the tombs is of concern. They face serious preservation problems that are typical for cave and rock sites. The tomb paintings are under threat because of humidity, floods, vandalism and theft. Humidity caused by previous visitors aggravates the problem (Figures 26 & 27, below). Subsequently much of the ornaments in the tombs have been already lost. As a preventive measure, but which also weakens necropolis’ appeal, the Department of Antiquities has closed the tombs to the public. Many of the tombs have also been locked behind rusty locks for many decades. At the moment, there is no detailed analysis of the current condition of the grave paintings. In the near future, there also seems no possibility of the Department of Antiques officially opening up the graves
(Lucke, 2005). In spite of the impoverished situation of the tombs, new examples, even intact ones, are constantly being unearthed but re-buried because of security concerns. These discoveries provide the information that will gradually complete the picture of a typical burial site in Abila. In addition to being published in academic publications, the rich burial culture of Abila deserves to be shared with public.

As extensively presented in the concept chapter, reconstruction can be seen as a method of archaeological presentation that enables innovative and intelligible presentations. Without doubt, reconstruction can play a significant role in converting Abila and its cultural landscape’s potentials, which are simply meaningless heaps of stones and dry landscape at present, into an expressive and appealing archaeological site. However it must be recognized that Abila does not possess as much archaeological remains as other Decapolis cities. The city’s scale, percentage of surviving remains and density of historical layers restricts conventional reconstructions. Moreover, the anastylosis of columns, seen commonly in other sites, cannot be a
breakthrough for the development of the site. Nevertheless, Abila and its cultural landscape exhibit further potential that can prompt development.

Firstly, reconstruction can be used to overcome obstacles that hinder preservation and presentation of the tombs. The replication of representative tombs can be presented instead of the genuine ones. A successful example of such an application was realized in Vejere valley, Spain. Prehistoric caves in Vejere valley have utmost historical importance due to coloured prehistoric paintings on the cave walls. The painted caves in Vejere valley had also experienced problems due to humidity and vandalism caused by a growing number of visitors. As a precaution, replica caves were reproduced and opened to visitors. Identical reproductions of authentic paintings were existent in the replica caves. In the same authentic environment of Vejere valley, replica caves were able to ensure genuine experience of visiting a prehistoric cave (Boniface, 1995).

A similar approach is also applicable in Wadi Qweilbeh, Abila. Tombs that are more susceptible to the effects of humidity can be sealed and instead replications of these tombs can be created in the same environment. Replica caves will also enable archaeologist to share the recent information on the necropolis of Abila with the visitors. Replica caves will also enable archaeologist to share the recent information increasing knowledge by recent excavations in the necropolis of Abila with the visitors. In a reconstructed cave, a fictional burial scene can be demonstrated basing on scientific information. Fictional scene can consist of wall paintings, gifts, fake skeletons that cannot be seen at the site without a reconstruction.

A similar approach is also applicable to Wadi Qweilbeh. Today, the cultural landscape of Abila cannot reflect its former role in the prosperity of the Roman/Byzantine city. However, the complex irrigation system of that era is not totally lost. Although it is almost impossible to understand the system fully, traces, water channels, small reservoirs and the topography give clues for a
theoretical reconstruction. In the presentation of the ancient local life in Abila, the agricultural and irrigation systems should constitute a major scene. Today’s curators have more means available to them for the presentation for such unorthodox subject matters that focus of ancient life itself instead of just the material evidences for it, then ever before.

In presentation, the traditional distinctions between museums and archaeological sites are blurring. Many archaeological sites make arrangements for “capsule experiences” which will enable visitors to have insights into the actual ancient life in the sites. One of the most well known and successful example is the Jorvic Viking Centre, which presents life in the first millennium BC, in York on the site of Coppergate excavations. In this centre, presentations include authentic clothing, and tools on models depicting daily life of the Viking village. In some cases visitors are encouraged to use reconstructed tools of the era (Barker, 1999).

Abila, which had a complex irrigation system in ancient times to enable agricultural production in an arid climate, has the potential to adopt a similar approach. The closed and confined spaces of the water channels and small reservoirs create ideal spaces to present, how, why and what kind of irrigation system was built. As in the York Viking case models, tools and schemes can accompany the “time capsule” experience. To a certain degree presentations could be based on the current state of scientific knowledge and educated assumptions. Undoubtedly at this stage concern arises about the degree of accuracy. Nevertheless there will be always different interpretations of archaeological and scientific evidence, and the curator does not necessary need to prefer one to the other. However in such cases, the encouragement of visitors to critically evaluate the interpretation of the data themselves can be a resolution. This approach becomes prevalent in disputed sites. In Jefferson Patterson Park situated in the USA, two visual interpretations of the current archaeological data are presented to the public to display the diversity of the interpretations (Lee Davis, 1997). In this
sense, different opinions on the building techniques of the water channels of Abila could be presented in a critical manner.

The last few years has witnessed growing interest in Abila, which has been reflected in new research. As mentioned, the most significant of these is the ongoing TEMPUS project, which prompted research into Abila’s archaeological/ environmental history and future development possibilities. Continuing archaeological excavations by the “Abila Archaeological Project” and the TEMPUS Project continuously produces new views on Abila and its connection to its environment. Though these projects eventually, enough has been accumulated for a diverse presentation.

Presenting Abila by careful but innovative reconstructions provides new insights into site developments. Protective reconstruction of rock-hewn tombs, “time capsule” experiences in water channels, agricultural systems and the theories for the abandonment of the city, as well as the anastylosis of monuments of the ancient city can all provide significant steps in converting the potential of the site into plausible projects.

The management of these suggestions within this proposal and presentations projects will inevitably be the hardest challenge. The site of Abila, reconstruction spots and the wadis has to emerge as a niche and then connect to the Decapolis Region’s tourism network. Encouragingly, as in the chapter of “Setting the Scene: Tourism & Archaeology in Jordan” demonstrates, Jordan’s tourism infrastructure is mature enough to undertake even larger projects in the south of the country. In the south, the Dana Natural Reserve, Petra and Wadi Rum are connected by a trekking route as well organized tours. Shorter paths are also feasible in the Decapolis Region, where the settlement density allows and scenic routes exist. Regarding this, an 8 km long Wadi Qweilbeh has a considerable potential. The largely uninhabited and unmanaged wadi, excluding orchards and periodic nomad grazing, creates an ideal enclosure for and to trek among reconstruction
spots. Various routes can be possible: an effortless trekking under the shadow of a green orchard or a challenging trekking of spectacular vistas along the hills. In any case, reconstructions will be the refreshing and high points of the tour.

The tranquillity and peace of this enclosure can be preserved if the wadi is confined to trekker access by a small entrance sites at both the south and north ends of the wadi. Naturally these sites will also function as information points, outlining the suggested trekking/walking tour along the wadi and the site of Abila and incorporating the associated reconstructions, and presentations. It is obvious that a simple path through the wadi does can be completed in 3-4 hours not constitute a challenging or major itinerary for many trekkers. But its combination with cultural heritage of Abila can create an outstanding cultural/natural destination. By orthodox reconstructions and imitating development process of major sites, for instance Jerash, Abila can only become a small and unattractive copy of them. Appraising Abila’s concealed natural and cultural values constitutes a promising way out.

In summary and with due consideration of the findings in the previous two chapters it can be stated that the successful development of the Abila site is dependant of a number of factors. It is important for the project, to have any sort of success, that local backing is a top priority and its ingratiation in to the projects grass roots and with a long-term outlook has to be incorporated. The participation of the local population as well as all interested parties, throughout and continuing after development is essential, though direct employment or as a consultable body. With appropriate management, the site needs to be developed into a satisfying tourist attraction inline with conservation and preservation protection as well as maintenance, in which the benefits derived are equality shared between all of the interested parties and stakeholders, but also keep within the realm of possibility.
The tools for sustainability analysis presented in the previous chapter provide the important elements to analyze this proposal for the development of the Abila site. They can help identify acceptable and achievable and even the wisest use for the site. The development of a trekking trail and presentations along the Wadi Qweilbeh has the potential benefits for the heritage of the Abila region; provide employment, income and other benefits for host community. Though the use of the tools and the development of trekking and cultural tourism, a more productive and harmonious relationship between the three elements of visitor, host community and the adjacent environment can be formulated, with the potential to set clear goals about the sites future.
7. Summary

In summary, heritage and archaeological sites have become an integral element of cultural tourism. After being a discrete tourism category in the 1970’s, cultural tourism is now seen as a mass-market activity. Nevertheless it is seen to exhibit both positive and negative impetus on the conservation of cultural heritage. Cultural heritage management and tourism management create conflicts at differing levels and in many cases there is the requirement for trade offs between two sides.

Jordan is not an exception to this general picture. To a nation with numerous refugee camps and tourism being of vital importance to a national economy with limited resources, a tourism strategy promises a better future. The ambitious goals of Jordan’s tourism plan places extra pressure on its cultural resources. Jordan aims at doubling its present tourism economy by 2010. Subsequently tourism is an element and an unavoidable fact that needs to be taken in to account in any realistic cultural conservation project.

The Decapolis region, one of the most prominent cultural regions of Jordan, has been undergoing paramount changes in recent decades. Extensive excavations and archaeological research is currently ongoing in Jordan, with several of these projects from the outset preparing archaeological sites for later tourism development. The reconstruction of the prominent monuments as well as advertisements, festivals, and general publicity has been major pursuits to create appealing and engaging archaeological sites. This swift tourism venture has already changed the appearance of the several Decapolis sites, not always for the better and created major tourist destinations, such as Jerash, however, at a closer glance, these projects reviewed in regard to preservation and sustainability ethics, reveal the loss of many values, including integrity.
Reconstruction is a presentation method in heritage and archaeological sites. In diverse fields and in various ways it serves archaeologists and architects to present heritage. Its innovative use results in the intelligible and appealing presentation of cultural heritage. Conversely, the reconstruction practice that has already occurred in the Decapolis cities is usually confined to the rebuilding of single monuments. Which are generally aimed at attracting tourists rather than retaining authenticity and philological anastylosis. However bad preservation and reconstruction efforts may lead to problems with sustaining visitor attraction, and specifically in the case of Jordan concentrated visitation may well result in an unacceptable level of degradation. Reviewing other reconstructions efforts from around the globe, highlights that there are many innovative ways to present archaeological sites, in which both preservation and tourism can be satisfied. Reconstruction can be a crucial method to convert the Decapolis sites into well preserved, sustainable tourist destinations if they are applied in an innovative manner.

The problems faced with the development of sites of special archaeological, cultural, environmental and/or scientific interest can never be totally eliminated, they can however be mitigated through appropriate management and legislation. Here management includes also the presentation of a site to the public, and in the case of architectural remains, whether these will be left as they are or restored to some extent through, anastylosis. But in addition, awareness is required; that any development may inflict adverse impacts that may endanger a site’s future. Therefore the implementation of sustainability analysis is fundamental for impact identification, impact assessment, mitigation formation, and carrying capacity identification as well as for the careful designing of future management plans; to manage newly ‘affected’ sites and to promote sustainable tourism, which should includes the regular identification and evaluation of resources in the ‘affected’ zone and when required, the effective mitigation of the resulting adverse impacts.
Furthermore, there is particularly a problem in the promotion of tourist sites in Jordan, the negative portray and stigmatisation of the Middle East has unduly hesitated the turning Jordan’s archaeological sites into tourist destinations. In these regards Jordan needs to improve its tourism image, encourage the development of promising attractions, and build the capacity of local tourism service providers. Success would require a multi-faceted national effort and the stimulus of private sector investment in tourism facilities. Most nations now recognise that it is the duty of a government with regards to conservational practices applied to archaeological sites and that good management of cultural tourism is central to the overall mission of conservation.

In addition tourism depends on creating a complete infrastructural network of facilities for all the archaeological and historic sites in the Kingdom, to aid this there needs to be better communication and strengthen the links between the local population, the Department of Antiquities, local authorities and the Governmental agencies. To ensure sustainable tourism development in the Decapolis cites, preservation and the proper reconstruction efforts are carried out, the Government needs to intervene in the market, to oversee the integration of planning and implementation and to encourage local involvement. A proactive stance is thus necessary to maximize the benefits and minimize the adverse effects of regional tourism development in the Decapolis region.
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Eco-tourism as a chance for development of Abila
(by Doreen Simmula and Agnieszka Wolowicz)
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1. Introduction

Being just one among thousands of archaeological sites in Jordan, Abila has had little opportunity for development. Its remote location and lack of a proper infrastructure as well as financial resources have prevented any further progress. Past and present excavations have revealed parts of its impressive structures, thus giving us an insight into its former importance as one of the Decapolis sites. Economic conditions are not the only factors that threaten the site. The lack of awareness of the local population about the importance of this heritage place led to a continuous devastation of the area. On the other hand its remote location preserved Abila as a quiet oasis, unspoiled by modern civilization, enriched not only by cultural but also natural assets which provide perfect conditions for a sustainable tourism development. Taking its features into account as well as the present economic and social conditions of the local population the Abila Project will be initiated.

Aiming at the promotion, conservation and development of the site, the project will introduce measures, such as the concept of working holidays, to attract tourists as well as locals to encourage and support further development and protection of the site and its surroundings. Taking the overall conditions, infrastructure, cultural as well as natural, into account, the proposed type of tourism will be in the field of alternative tourism. Following the trend of tourism development in Jordan\(^6\) and using the potential giving by a less developed site, activities will focus on the sector of “niche products” in tourism such as eco-, adventure, cultural and rural tourism activities\(^7\). It is especially important to get the local communities involved in the project, not only to improve their economic conditions but also to control and reduce negative social impacts of tourist activities and the tourists’ influence on the local people. It has been pointed out by scholars that “A notable impact of tourism on the traditional values is the demonstration effect, where local patterns of consumption change to imitate those of the tourists, even though local people only get to see a side

\(^{6}\) Jordan National Tourism Strategy: 2004-2010
\(^{7}\) This is where the problematic of definitions starts and will be dealt with later in the paper.
of the tourists that is often not representative to their values displayed at home."
x8 This problem among others will be addressed in the measures introduced by the
project.

The paper is going to assess Abila’s potential for alternative tourism
development with a focus on ecotourism, provide some theoretical background
concerning definitions of alternative tourism and propose development
strategies, their implementation as well as their promotion and evaluation, to
guarantee an adequate performance of the project.

2. Location

Abila is situated north east of the city of Irbid in Wadi Quailbah,
approximately 5.3 km south of the Yarmouk River and Wadi Esh-Shallah in Jordan.
The site consists of ruins of previous settlement going back to the Hellenistic
period, through Roman, Byzantine and Umayyad to Ottoman times. However,
numerous archaeological evidences such as pieces of pottery indicate that the
site was already occupied during the Bronze Age (Early, Middle, and Late) and
the Iron Age9. Along the Wadi Quailbah ancient burial places and remainings of
ancient water system can be found.

Nowadays Abila is deserted; the local population lives in the nearby
villages Hartha, Hubras (to the west), Dhuneiba and Kharja (to the east) and El
Khureieba (to the south).

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8 Fennell, David A. 2002: 101
9 Nuseirat, S. (2005), Development plan for Abila, Yarmouk University
3. Site assessment
In order to develop any scheme of activities for Abila, first an assessment should be done in which both potential and constraints will be analysed.

3.1 Potential
Abila and its surroundings are rich not only in cultural but also natural assets. The ancient settlement, partly excavated by now, is located in a picturesque valley possessing a variety of geological forms (different formation of limestone), vegetation (olives and pomme granates) and fauna life.
History of settlement in Abila region goes back to the early Bronze Age. The place flourished during Greco-Roman period. At that time Abila was a local metropolis and a centre of trade within Decapolis\textsuperscript{10}. The city consisted numerous temples, rich mansion houses, theatre.

Extensive necropoli situated on the both side of the valley also comes from this period.

After the fall of the Roman empire Abila became a part of the Byzantine empire. During that time the Christianity spread around the region. Ruins of many basilicas are to be seen even today.

In 7\textsuperscript{th} century A.D. Abila became part of the Umayyads kingdom. This period also contributed to archaeological findings in the region with the ruins of

\textsuperscript{10} Decapolis was a political union of 10 cities located along the eastern frontier of the Roman Empire

\textsuperscript{11} adopted from: Afanasyeva, D. A. (2004), Guidelines for sustainable tourism management at cultural heritage sites. A case study from the cultural site of Abila, BTU Cottbus (adopted from W.Harold Mare’s publications in the Annual of the Department of Antiquities of Jordan: various years)
Umayyad palace.

Abila has is also being associated with a Jesus Christ who was to visit this city while preaching journeys to the area of the West Bank of Jordan: “When Jesus finished saying these things he left Galilee and went to the Territory Of Judea On the other side of the river Jordan. Matthew(19:1), though the name of the city was not mentioned in the Bible.

Far from main routes Abila resembles a quiet oasis, unspoiled by modern civilization. These conditions seem to be auspicious for the development of tourism in Abila region.

As found in numerous interviews carried out by Yarmouk University students, the positive attitude of the local population (especially from nearby Hartha) towards possible tourism development in the Abila region also appears promising.

Pict.3 Abila – a view of the ancient city.

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12 Also D. Afanasyeva stresses the positive attitude of local population for tourism development in the region, in: Afanasyeva, D. A. (2004), Guidelines for sustainable tourism management at cultural heritage sites. A case study from the cultural site of Abila, BTU Cottbus, p. 120
3.2 Constraints and obstacles

Abila is located far from the top Jordanian tourist attractions. Additionally, a poorly developed infrastructure and the absence of proper signposts in the vicinity make it difficult to reach the place. There are only field roads leading both to the excavations and ancient cemetery, making it impossible to travel by tour buses or cars. There are also no places where the tourists may receive information, rest, have something to eat or use the restrooms.

Furthermore the lack of awareness about this heritage place leads to a continuous devastation of the area, especially of the graves, by parts of the local population. So far there have not been any educational or information programs targeting at the local population which could improve the situation.

No matter how important Abila was from a historical point of view, at present it hardly encompasses any potential for development of tourism on a wider scale. Ongoing archaeological excavations have uncovered only a certain percentage of the old settlement and therefore make it almost impossible for Abila to compete with places such as Um Qeis or Jerash to attract tourists' attention.

What is more striking is the fact that Jordanian sustainable tourism
development plans 13 do not include Abila among places where any improvements are planned to be made in the near or distant future. With this decision the government makes it more or less impossible for Abila to receive any financial means.

4. Sustainability

4.1 Defining sustainability

Many attempts have been made to define “sustainability” in order to set a standard for any kind of tourism development as well as management planning. The term still causes some kind of ambiguity14. Most of these definitions state that sustainability in tourism reflects, “[...] the concept of fostering development that is least destructive in the long run of the resource upon which it depends.”15 Taking this into account Abila with its archaeological sites is the resource any kind of tourist development depends upon in this region.

Other definitions go even further into detail: “Sustainable tourism meets the needs of the present tourists and host regions while protecting and enhancing opportunity for the future generations of tourists, leading to the management of all resources in a way that fulfills economic, social and aesthetic interests while maintaining cultural integrity, essential ecological processes, biological diversity and life-support systems.”16 but still leave the field wide open for interpretation and positioning on the market.

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14 Gunn, Clare A. 2002: 82
15 Gunn, Clare A. 2002: 81
16 Script “Land use and habitat management by animals” 2003/04: 55
4. 2 Principles for sustainable tourism (Tourism Concern 1992)\textsuperscript{17}

1. Using resources sustainably
2. reducing over-consumption and waste
3. maintaining diversity
4. integrating tourism into planning
5. supporting local economies
6. involving local communities
7. consulting stakeholders and the public
8. training staff
9. marketing tourism responsibility
10. undertaking research

These principles should be taken into account for any kind of tourism development not only in Abila and its surroundings but throughout Jordan.

4.3 Alternative tourism

As a consequence of the dissatisfaction with conventional forms of tourism, mass tourism, which have ignored ecological as well as social elements of foreign regions “[…] in favor of a strictly profit orientated approach to the delivery of tourism products” alternative forms of tourism have developed\textsuperscript{18}. According to Fennell there are three common forms of alternative tourism – adventure, cultural and ecotourism. A precise and clear definition of each of the three has become almost impossible due to the increasing overlaps between them. A number of marketing and government studies even consider them as almost synonymous which is visualized in Figure 1\textsuperscript{19}.

\textit{Tourism activity spectrum}\textsuperscript{20}

\textsuperscript{17} Fennell, David A. 2002: 21
\textsuperscript{18} Fennell, David A. 2002: 30
\textsuperscript{19} Fennell, David A. 2002: 53
\textsuperscript{20} Fennell, David A. 2002: 53
“Depending on the setting and situation, ACE either expands or contracts to represent different concentrations of adventure, culture and ecotourism in name alone or in product content.”\textsuperscript{21} Tourist products that are “[…] solely classed as ecotourism avoid the inclusion of conditions that relate to culture tourism or adventure tourism.”\textsuperscript{22}

The World Tourism Organization defines cultural tourism as “[…] the movements of persons essentially for cultural motivations such as study tours, performing arts and cultural tours, travel to festivals and other events, visit to sites and monuments, travel to study nature, folklore or art, and pilgrimages.”\textsuperscript{23}, including some ecological aspects like “travel to study nature”.

Canadian Tourism defines adventure tourism as “[…] an outdoor activity that takes place in an unusual, exotic, remote or wilderness destination, involves some form of unconventional means of transportation, and tends to be associated with low or high levels of activity.”\textsuperscript{24} Ecotourism on the other hand is defined as: “[…] a responsible form of travel in natural areas, which aims at

\begin{itemize}
\item \textsuperscript{21} Fennell, David A. 2002: 53
\item \textsuperscript{22} Fennell, David A. 2002: 54
\item \textsuperscript{23} McKrcher, Bob and Cros, Hilary du 2002: 4
\item \textsuperscript{24} Fennell, David A. 2002: 49
\end{itemize}
conserving the environment and helps sustain the livelihood of local people. Ecotourism is understood to incorporate types of nature tourism which, in a responsible way, attempt to minimize environmental impacts and socio-cultural changes, contribute to funding protected areas and create earnings potential for the local inhabitants.”

This definition already includes “types of nature tourism” which adventure tourism could be referred to as well. If not in the definitions the problem of overlapping becomes obvious when taking a look at the activities offered under both concepts. Activities such as nature observation, wildlife viewing (bird watching), hiking, kayaking and diving are products offered to tourists by adventure and ecotourism. Besides that taking part in cultural events and photography as products of ecotourism, mentioned in the definition above, fit the spectrum of activities offered by cultural tourism as well. As mentioned above this paper will work with the concept of alternative tourism with a focus on ecotourism in particular. As its definition and Figure 1 already state there will be an overlapping with the other two common alternative tourism forms. The focus on ecotourism results from the remote location of Abila, natural surroundings, and the desired low-impact of tourism activities.

5. Development/Management Proposals

In order to protect and conserve Abila’s rich archaeological features as well as its surrounding natural assets and to contribute to the development and well being of the local population an adequate development plan is needed. The establishment of tourist activities from a sustainable point of view, a low-impact development, would contribute to the economic development of the region and could therefore support and enhance the conservation of the site.

The question is what kind of tourism should be introduced in the region?

25 Script “Land use and habitat management by animals” 2003/04: 57
26 see figure 1
27 Script “Land use and habitat management by animals” 2003/04: 57; Fennell, David A. 2002:49
28 tourism development characterized as small scale and slow progress - Gunn, Clare A. 2002: 85
According to the Jordanian tourism development plans\textsuperscript{29} a new tendency can be observed: the need for the development of so-called “niche products” such as eco-, adventure\textsuperscript{30}, cultural or rural tourism and the development of new tourist areas. It must be mentioned here that the very “niche” types of tourism according to the World Tourism Organization reports are also believed to “hold the promise of incorporating best the principles of sustainability”\textsuperscript{31}. Due to its features mentioned above, Abila seems to fit perfectly.

The objective of the project can be summarised as:

- creating hiking routes and educational routes along Abila
- creating a network of guest houses and rooms provided by the local population
- creating IT centers to advocate, promote and support the development of the site and its surroundings
- creating new jobs for the local population

\section*{6. Aim of the project. Target groups}

This project is designed to turn Abila into an eco-tourist destination and to activate the local community to diversify their income sources beyond their present means.

The project aims to address various target groups including professionals, trainees, students, school children, local population as well as tourists, both Jordanians and foreigners, whose interests focus on nature and culture issues. In short - for all those who want to escape their modern urban or suburban

\textsuperscript{29} Jordan National Tourism Strategy: 2004-2010
\textsuperscript{30} Unlike the Jordan National Tourism Strategy, other resources usually place adventure tourism within ecotourism or special tourism. See: Adventure tourism encompasses: hiking, trekking, sailing, skiing, cycling, rock climbing, ballooning etc.
\textsuperscript{31} International Tourism: A Global Perspective, WTO Tourism Education and Training Series, 1997, p. 122
environments with the desire to visit simpler, less developed, and close to nature areas and for those who want to participate in the development of Abila as a tourist destination.

Young professionals, trainees and students may find Abila to be a perfect place to fulfill their internships tasks or to put their study projects into action and contribute to the development of the area.

7. Implementation stages

The Implementation of the above-mentioned management proposals should be carried out as a two-stage program, consisting of the preparatory and the actual implementation stages.

7.1 Preparatory stage

The aim of the preparatory stage is to set up a coordination group responsible for the initiation and co-ordination of the work at the site and the establishment of the project center. Scientific and practical patronage could be undertaken by the Department of Cultural Resource Management at Yarmouk University in Irbid.

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32 International Tourism: A Global Perspective, WTO Tourism Education and Training Series, 1997, p. 121 f
However, it must be mentioned here that other universities as well as the local chamber of tourism should also be invited to cooperate in the project. At this stage university students of different specialisation should be encouraged to contribute to the Abila project as part of their regular class assignments or internship periods. Students of archaeology and architecture may collect and prepare information (including photos, drawings etc.) concerning the excavation area and graves which, in the future, could be used in brochures or information charts on the site. In GIS seminar gained knowledge can be used to prepare detailed maps of the area, marking attractions and proposed hiking routes.

A crucial point in the preparatory stage is to address the local population in order to get them informed in the ongoing project and to win their interest in it, too. Representatives of the local population need to be involved in the decision-making process, as without the local consent any project work cannot be done. In information sessions locals should learn about benefits connected to the development of eco-tourism in their area and also about the ways they may contribute to the project. Due to the fact that in the vicinity of Abila there are no

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33 Other universities such us: Jordanian University of Science and Technology and Irbid University
public accommodation facilities there is a need to create a chain of guest rooms by local families. Opening their villages to tourists will allow them to diversify their income sources beyond their present means such us cattle breeding. This in turn might allow them to improve their living conditions.

During the preparatory stage training courses for local guides and people interested in serving as host families for future tourists should also be organized. It should be possible for those people to receive low interest loans from the project funds.

Last but not least financial issues must be dealt with. In order to get the project started and to keep it going the Abila Project Fund should be established. Financial resources should be drawn from both, the governmental and the private sector (national and international) such as the Ministry of Tourism and its local chambers, Ministry of Municipalities, Ministry of Planning, Queen Noor Foundation, Royal Society for the Conservation of Nature, World Bank, United Nations Development Project, Development Programs offered by the European Union and finally Jordanian private enterprises and donors.

7.2 Actual implementation stage

At the actual implementation stage such activities as: establishing volunteer programmes, tourist routes and tourist information centres are projected.

7.2.1 Establishing volunteer programs

Volunteer programs that will be offered can be divided into different types which will be based on the activity or the age of the group. They will target at both tourists and locals (especially school children) and will be offered throughout the year, also in holiday periods as so-called “working holidays”. Volunteer camp participants will be accommodated in local host families. Accommodation will be paid for by the volunteers’ financial contribution or by sponsors. Apart from the accommodation the volunteers will have a chance to
dine with their host families and get an insight into local, traditional life. Another option for lodging will be a simple campsite. Even here participants will get their meals prepared by cooks from the village. Apart from working within chosen programs the participants will have one or two days each week to visit chosen heritage site, participate in workshops like the Jordanian Cuisine, Worlds of Spices, and Traditional Dance run by the locals.

7.2.2 Types of volunteer programs offered by the Ablia Project:

- Archaeo-Volunteering
  The aim of this program is to enable people interested in archaeology (not only students of archaeology) to assist in ongoing excavation work in Abila. Depending on experience and abilities they will help in removing top soils, making sketches, documenting findings etc. This program can serve as an internship period for university students.

- Nature Volunteering
  This program is addressed to all those concerned about the environment. Within this program volunteers will help to set routes for hiking, label them and keep them in order, take care of the local vegetation etc.

- Conservation Volunteering
  Within this program volunteers will have a chance to develop their practical abilities when it comes to conservation of archeological materials, preservation methods when it comes to stone architecture etc.

- Community Volunteering
This program is designed for volunteers who would like to work with the local community by sharing their abilities and talents. Participants of this program could help to organize free time activities (especially during holidays) for children such as workshops or single events. Holiday programs for children may include language courses which will be taught in co-operation with local schools.

### 7.2.3 Establishing tourist routes

There will be several routes within Wadi Quelbah up to Wadi Ash-Shallala and the Yarmouk River prepared for tourists. All of them will be signed and equipped with information charts, tables and maps. Both the maps and signs will show the direction and estimated time the tourists need to get to a chosen place and also the level of difficulty. The routes can be used both by independent tourists and guided groups.

![Pict. Example of signage on the route](image)

### 7.2.4 Types of routes

In Abila and its vicinity such routes will be established:

- **Abila of Decapolis** – route through the archeological site.
- **Ancient Burial Traditions** – route on which tourists will be able to visit ancient graves along the Wadi Quelbah and learn about ancient burial traditions.
- **Water channel routes** – route for tourists looking for adventure and who are interested in ancient engineering techniques, hiking along
underground old water channels.

- Flora and Fauna of Abila and Bird Watching Route – route focusing on presenting local vegetation and animal species (especially birds) inhabiting the Wadi.
- Rocky Route – route along the surrounding valleys where tourists can observe various geological features.
- Beautiful Vista Route – route focusing on special landscape features and view points from where tourists can observe the beauties of nature, e.g. the sunset.

7.2.5 Establishing Tourist Information Centres

The centres will operate in local municipality edifices in the villages: Hartha, Hubras, Dhuneiba, Kahrja and El Khureiba. At a later stage these centers could be moved to restored historical buildings. The local TIC will provide information on accommodation facilities in the area, guided tours, local guides,
special events and workshops as well as brochures and maps. The centres will also facilities contacts between local host families and tourists interested in staying in guest houses. They will posses a data base with addresses, vacancies, description of the services offered and the like.

8. Promotion

The success of the Abila Project depends not only on the preparation of an infrastructure for tourists or the creation of interesting programs, but also on its promotion through which it will be possible to address the public. The project and Abila can be promoted by using various media like:

- Internet – will include the project and programs as well as events connected to it
- Brochures and posters – which would be distributed among tour operators, tourist agencies, and chambers of tourism, other IT centers in Amman, Irbid, and Umm Ques etc.
- Information Packages for Schools – containing information about the Abila Region and possibilities of trips and workshops for students.
- Advertising clips – which could be broadcasted by local TV or radio stations.

9. Evaluation

In order to estimate and evaluate the performance of the ongoing project frequent monitoring needs to be carried out by responsible authorities such as chambers of tourism, Ministry of Tourism and the Royal Society for the Conservation of Nature, and consultants of non-governmental organisations. Participating tourists as well as researchers will be asked to fill in questionnaires to evaluate the level of their satisfaction concerning experiences, learning effects,
accommodation, food and various services provided for them. Likewise the performance of tour guides and operators is of special interest and should also be monitored.

The evaluation of these questionnaires will unveil mismanagement of the project, concerning carrying capacity of natural areas and cultural “conflicts” etc. and therefore contribute to the further development of the project and the site. It will also show positive outcomes which will encourage all participating parties in their future work.

10. Summary

As discussed earlier was and still the inaccessible location of Abila one of the major constrains for tourism development in this region which on the other hand has preserved its archaeological and natural features from being overrun by masses of tourists and from becoming a victim of an uncontrolled urban development, as it has happened to many other sites. In respect to Abila’s given features and to better the situation of the local community it seems most logical to introduce the concept of ecotourism as the form of tourism to promote the site and its surroundings as well as to assists in its development and protection. The Abila project will precisely aim at this idea. “To residents living in or near wildlife areas, ecotourism can offer new opportunities for jobs, enterprises and skill development.”

Community involvement will be the base of the project and therefore play a major role in the activities planned and undertaken by it. Visitors and locals as well as students of various Jordanian universities will contribute their skills and knowledge to the success of the project.

The implementation of the project needs to be undertaken in a two stage scheme whereas the preparatory stage, described in detail above, will set a basis for future activities such as the establishment of volunteer programs, tourist routes, and tourist information centers. The promotion of the project will also have a major impact on its success and will therefore be carried out by various

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34 Faculty of Archaeology and Anthropology Yarmouk University 2003: 27
means of media for instance the Internet, brochures and posters, information packages for schools, and advertising programs on TV and radio.

To be able to evaluate the performance of the Abila project a constant monitoring of its activities and their outcome will be necessary and undertaken by the responsible authorities of the project, consultants of different institutions such as World Tourism Organization. The participation of tourists and locals in the evaluation process will also be of great importance. They are going to be asked to fill in questionnaires to rank and evaluate the performance of participating tour guides and operators, accommodations provided by locals, experiences made while staying within the community, as well as tours and other services provided for them. The analysis of the questionnaires but also of the number of tourists and residents taking part in the project will give evidence of the overall performance of the Abila project and the participants satisfaction which in turn will be the basis for a further development and initiation of activities and introduction of services provided by the project.
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A hint for management of Abila. Comparison of Abila in Jordan and Takamatuzuka in Japan.
(by Akiko Kikuchi)
Introduction

The aim of this thesis is

- to describe Abila briefly
- to describe Takamatuzuka
- to compare and contrast Abila and Takamatuzuka
- to introduce Takamatuzuka as a hint for Abila project development
- to suggest a few points for Abila project

It is hoped that the case of Takamatuzuka could be an inspiration for those involved in Abila project.
Abila Location

The Map of Abila (Access date 08/06/05, http://www.abila.org)
Excavation works

The works have been undertaken by Dr. W. Harold Mare from the United States.

“When the survey and excavation started in 1980 and 1982, Dr. Mare and his staff saw on a part of Umm elmad the scattered columns of what was thought to be an ancient temple, but which, on excavation, turned out to be a seventh-to eighth-century A.D. Christian church. “(Access date 09/06/05, http://www.bibleinterp.com/excavations/)


Excavation Goals for 2004 was described as

“Even though much of value for our understanding of Middle Eastern life during biblical times has been uncovered at Abila, much more work remains to be done. Our goals for the upcoming excavation season are ambitious. We plan to
1. Excavate further to the east and north of the partially reconstructed (in 2000) sixth-century A.D. church basilica on Tell Abila (the north tell) to discover additional evidence of the many archaeological periods represented there. These range from the Late Islamic back through the Early Bronze periods.

2. Excavate along the outside of the south side of the seventh- to eighth-century A.D. basilica on the south tell, Tell Umm el Amad, to uncover additional side rooms of the Area D church there.

3. Excavate down to bedrock in the area of the proposed theater in the civic center. Also in this area, we will work on restoring the Umayyad palace/fortress built within the theater cavea; probe into the internal structure of the nearby bath house ruins; excavate the areas to the west and south of the sixth-century cruciform cathedral; and continue excavating the single-apse church on the hilltop east of the theater.

4. Expand the tomb excavations all along Wadi Quailibah on the east side of Abila, looking for and excavating tombs from the Bronze Age through the Byzantine period.’’

(Access date 09/06/05, http://www.bibleinterp.com/excavations/Abila_of_the_Decapolis.htm)

In the middle of the project,

“Dr. Harold Mare died in a car accident at Abila during the summer of 2004. Responsibility for the project has passed to Dr. David Chapman at Covenant Theological Seminary.’’

(Access date 09/06/05, http://users.stlcc.edu/mfuller/aia/aia.abila.htm)
Condition of the site

Except the period of excavation, the site is neglected. As it is clearly seen, the reconstruction of the site is not appropriate. The problem is it is doubtful if the excavation team followed the adequate method of investigation.

Conservation works at the Takamatuzuka archaeological site

The latest news from this one of the most important sites in Japan came out of blue. Cultural Agency of Japan decided to take a fundamental conservation actions to the site.

It has been well known that the site is threaten to its degradation of the value due to combination of factors.
Location of the site:

Nara prefecture, Asuka village
Significance:
This burial mound was made during the end of 7th century to the beginning of 8th century. The stone room inside of the mound is decorated by paintings related to star, moon, sun, 4 gods of each direction and some groups of persons. This site is designated as a national treasure. It was discovered in 1973.

Conservation Works:
It has been conserved by the state since it was discovered. The condition of the conservation has been so stable without a major problem for 30 years that regular inspection is done only once a year.
In 2001, several types of mold were discovered in the stone room by the regular inspection. Since molds were discovered, it has been examined more frequently to find and get rid of molds.

Condition of the stone room:
Plaster is pasted with 3 to 5 mm thickness as a base for the paintings on the tufa wall. Once this plaster layer falls, paintings disappear. Lead is detected from the plaster. Percentage of lead is higher at the painting parts. This plaster layer was already in a poor condition when it was discovered. Some of them are completely exfoliated. To stabilize the environment of the stone room, experts decided to keep the temperature in the room ±3 degrees from 14 degrees, to keep 95% of humidity without dew formation, to keep amount of carbon dioxide minimum and to paste leaks of the ceiling stone and ashlars’ clearance. To glue peeling plaster, the experts injected acrylic resin (paraloid B72) dissolved an organic solvent (trichloroethylene) into the leaks of the plaster. This trichloroethylene has toxic properties including cancer-causing agent.
When the first molds were observed, experts tried to clean them with alcohol. Since then the molds have not expanded nor damaged the wall.
The paintings are drawn on the each direction of the walls and the ceiling. Groups of women and men are drawn on the east wall and the west wall. 4 persons are drawn closer as a group. The height of each person is approximately 40 cm. 4 gods are described on the each direction of the wall which represents (red phoenix/south, azure dragon/east, white tiger/west, black warrior/north). The sun is drawn on the east wall above the blue dragon. The moon is on the west side above the white tiger. Star atlas is drawn over the ceiling. (The red phoenix is expected to be drawn on the south wall, in fact, backside of the entrance door. But it is completely faded.)
Above left: the blue dragon
Above right: the white tiger
Below: the black Warrior (a turtle and a snake fighting)
The star map on the ceiling
Above: the east wall
Below: the west wall

**Condition of the mound:**
The mound was initially covered with bamboos and shrubs including ilex. However the ilex died after 30 years time.
Investigation by experts:
A group of experts consists of those from art history, conservation and restoration techniques, conservation science and archaeology. The group discussed about the factor of growth of molds and restoration of the damaged wall. Another group of actual conservation work was also organized from
The molds found:

- Fusarium sp. (brown color)
- Cylindrocarpon sp. (brown)
- Gliomastix sp. (black)

Methods of examination in the stone room:

- Moisture measurement by infra-red radiation
- Moisture distribution measurement
- Temperature distribution measurement
- Fluorescence X-ray analysis
- Floating fungus collection
- Carbon dioxide density
- Visual check

Restoration and conservation work done:

- Cover the mound with waterproofed thermal insulation sheet to prevent rail water coming into the room
- Dig drains so that water does not flow into the room from the entrance
- Carry inspections on soil layer formation and moisture content
- Fungicide
- Extirpation of aunts and prevention of other insects
- Removal of roots of dead woods
Removal of molds:

Breaching with hydrogen peroxide water and cleaning with laser apparatus would be used at the same time. However, it is concluded that it is difficult to remove molds without damaging paintings.

*Laser cleaning

Laser radiation is providing successful in museums for the surface cleaning of sculptures, particularly those that are fragile and require cleaning without mechanical contact and without immersion in a liquid. The advantage of using a beam of laser light in contrast to an air-adrasive or steam lies in the minimal contact of the beam with the stone surface. The laser beam does not leave any deposit on the surface and simply removes the area of dirt at which it is aimed. It is possible to cause damage with laser cleaning, for example, microcracking and vitrification. Laser is most frequently used on white marble surfaces as the process relies on the cleaned white underlying surface to reflect back the beam and the laser is cut off automatically. (Nicole Ashurst, 1994)

As this site is under the supervision of the state, I am going to explain what “the state’s supervision” means explaining which organization is responsible for and what kind of law exists for conservation of cultural and natural properties.

Ministry of Education, Culture, Sports, Science and Technology

Ministry of Education, Culture, Sports, Science and Technology has Agency of Cultural Affairs.
Agency of Cultural Affairs organizes programs to enhance international cultural exchanges, encourage creative artistic activities, promote cultural activities in local areas, protect copyright system, preserve and utilize cultural properties.

The total budget of the agency amounts 100 billion yen. In this budget, about 11 billion yen is budgeted for promoting conservation of national treasures and important cultural properties. About 26 billion yen is for development and use for historic sites. 10 billion yen is allocated to maintaining traditional performing.

Cultural properties include tangible cultural properties, intangible cultural properties, folk cultural properties, monuments and groups of historic buildings. The monuments are divided into 3 categories of historic sites, places of scenic beauty and natural monuments.

The central government establishes and enacts Cultural Properties Protection Law. The central government is responsible for selection and maintenance of cultural properties and has to provide subsidiary to properties' owners.

Local governments establish and enact ordinances for protection of cultural properties. Local governments are responsible for selection and maintenance of cultural properties that are not selected by the central government and have to provide subsidiary for those properties.

Owners of properties are in charge of maintenance and have to open the property to the public.

General public have to be cooperative to the activities related to protection of cultural properties. In case of digging out ruins, they have to report it to the authorities.
Special tax system, decrease of income tax, is applied to promote public ownership of cultural properties.

All the activities above are under control of the agency.

**Laws**

- **Cultural Properties Protection Law**
  In the general provisions, it is written that the law is aimed to protect cultural properties using them in order to contribute to Japanese and also world cultural development.

  This law is a public law which has punitive provisions. The highest penal is 5 years imprisonment or fine of 1 million yen.

  This law helps the agency to carry its task to protect cultural properties in Japan.

- **Old Town Preservation Law**

  There are 8 designated towns of the law (Kamakura, Zushi, Kyoto-shi, 5 towns in Nara).

**Problem**

Development and conservation cannot be existed in harmony. Kyoto prefecture allowed constructing houses in a buffer zone of a World Heritage in Kyoto under the control of Old Town Preservation Law and Kyoto’s ordinance. World Heritage Center asked the understandable explanation to the mayor, but the houses were anyway constructed.

**The decision taken by Cultural Agency**

The agency declared the final plan for the conservation of the site.

- Take away the soil over the stone room
- The stone room is completely taken out of the ground with special tools after
the removal of the soil

● Each parts of the room are carefully restored in a laboratory under temperature and moisture control

● The period of this conservation will be during January and June, where the temperature is low, in order to avoid influence of mold growth
Comparison of Takamatuzuka and Abila

Abila excavation is carried by private level; on the other hand, Takamatuzuka conservation works are interests of national level. Abila works are carried by insufficient budget from donations. Takamatuzuka conservation is done by the subsidiary of the government. It is seemed that conservation is neglected at Abila. The excavation team must have concentrated on getting visible results as soon as possible while they ignored the adequate way of conserving the condition of the site.

Original site of Takamatuzuka is closed to public. In stead of opening the original, the replica is shown for public use including tourism. And it attracts tourists. Although Abila site is a reach for everybody, it has not yet been a place to go for tourists.

The importance of Takamatuzuka is very high for researchers and tourists; on the contrary, Abila is not as important as the other sites in Jordan.

It is expected that the Japanese government will be investigating enough allocation for Takamatuzuka; on the other hand, it is doubtful that the Jordanian government investigates some budget for Abila.

Takamatuzuka site is relatively small compared to Abila site. This means that it is difficult for Abila to take the way of conservation for Takamatuzuka. Takamatuzuka is small rooms underground, so it is relatively easy to cover the whole of the site. On the other hand, Abila is vast in its area in an open space.

As the wrong method of investigation has taken for Abila, it is already difficult to revive the first condition of the site.
Suggestions for Abila project

Regarding the comparison with Takamatsu-ku and current situation of Abila, some suggestion could be concluded.

- Revise the excavation plan
  Dr Mare’s death can be a reset of the excavation project, which has gone wrong. Remake the plan thoroughly regarding the following points

  ● Preliminary investigation
    1. Distribution
    2. Topography
  ● Investigation
    1. Setting the target of the investigation
    2. Investigation plan and organization
    3. Deciding the area of the investigation
    4. Deciding the method of investigation
      A) Method of excavation
      B) Collecting method of remains
      C) Records
    (Check points are referred from Takuya Iwasaki, 1993)

Distribution, target setting, plan and organization, methods of investigation are especially well revised.

● Assortment and conservation
  1. Record of the condition of the remains
  2. Registration of the remains
  3. Cleansing
  4. Measurement
  5. Reconstruction
  6. Digitalization
- **Make Abila an educational site**

   As the other sites in Jordan already work as tourism attraction, Abila does not have to be presented in the same way as the other sites. Under the condition of more careful treatment, Abila could be introduced as a non-specialist involved excavation site. However, more careful guidance for students and volunteers is required.

- **Analyze the failure of the excavation**
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Value-based archaeological site management –
A case study from Abila in Jordan
(by Chen Ting)
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Introduction

Talking about cultural heritage management, the identification of the values is always a central part and a start point. Much efforts has been made to define the certain values such as historical, cultural, educational, economic etc. to provide a basic context for the planning of cultural heritage management. Recently the emphasis is put on the discussion of how to assess the values, how to integrate the values into management policies, and how the management decision influence the values. Here in this case study of Abila, these questions will be analysed both in a general way and by the illustration of specific values.

Methodology – value-based archaeological site management

Traditionally the attention of conservation is attached mainly on the historical, cultural, artistic and scientific values of heritage. Under the growth of public concern for heritage and the participation of more groups in conservation projects, people have started to expect multi-benefits from the heritage resource. A heritage site can be a place for cultural and educational functions, or for recreation, or for tourism, or for all of them. The key point is to consider all the benefits, the diverse interests of different groups in one unified plan to avoid possible conflicts. The value-based management is one of the most effective approaches that provide clear guidance for the decision making.

The value-based management starts with the systematically analysis of all the values and significance of the site. Then a comprehensive plan and practical suggestions need to be made to protect those values. It does not concentrate on solving specific problems in certain aspect, but focuses more on the totality of the sites. This differentiate it from traditional preservation methods.

values-based management is characterized by its ability to accommodate many heritage types, to address the range of threats to which heritage may be exposed, to serve the diversity of interest groups with a stake in its protection, and to suggest a longer-term view of management.  

Another important feature of the value-based management is that it provides equal positions to all the values without giving any priorities to traditional values such as historical, cultural and educational. Sometimes even more energy is put on social, economic values because they are more often making conflicts.
About this case study

This case study looks at the archaeological site, Abila of Decapolis in Jordan, which has a history of more than 2000 years. The value-based analysis of management will start from the identification of the values embodied in this site and the relationship between the value preservation and the activities of stakeholders. Especially for an archaeological site it is important to keep the balance between heritage preservation, academic excavation and tourism development.

The case study based mainly on the review of relevant literature and documents. In the following sections a discussion concerning the value-based management of Abila archaeological site is processed. The section “Management Context” gives a general background of the site, including a geographic description of the site, the brief history of the site development, the management environment for the site and the interventions imposed on the site. The section “Understanding of the Site” firstly figures out the values attached to the site. Then the stakeholders that have been involved or may be involved in the site management are identified. Meanwhile the threats and opportunities for value preservation is described. The last section focuses on the management of the site at both national and regional level. Possible policies are proposed concerning the strategies of site management of Abila.
Table 1. Summary of heritage value typologies devised by various scholars and organizations (Reigl 1982; Lipe 1984; for the Burra Charter, Australia ICOMOS 1999; Frey 1997; English Heritage 1997).

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<td>Economic</td>
<td>Aesthetic</td>
<td>Monetary</td>
<td>Cultural</td>
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<td>Historical</td>
<td>Aesthetic</td>
<td>Historic</td>
<td>Option</td>
<td>Educational and academic</td>
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<td>Commemorative</td>
<td>Associative-</td>
<td>Scientific</td>
<td>Existence</td>
<td>Economic</td>
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<td>Bequest</td>
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<td>Newness</td>
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<td>Recreational</td>
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<td>Aesthetic</td>
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Source: Adapted from Mason, Assessing values in conservation planning: methodological issues and choices

In the value-based method, a crucial task is to decide where the values lie, after all different values are defined. Which elements in the site embody what specific value? To what extent the intervention can be made without destroying the significance of the site? And how to guard the site to protect the essence which makes the site significant? To understand the site thoroughly is a critical step for making a good management plan.

Concerning how to categorize the values of a heritage site, many international charters and cultural documents have different versions (see Table 1). Normally the clear distinction is made between economic values and cultural values. In this case study the values of the site will be separated into two main categories, socio-cultural values and economic values, or immaterial values and material values, which are the two sides of the contradiction in the practice of heritage conservation (see Table 2). Another useful method for heritage value typology is to base the separation on the correspond to different stakeholders, which discriminate different motives for involvement in heritage conservation.

Table 2. Typology of heritage values

<table>
<thead>
<tr>
<th>Socio-cultural Values</th>
<th>Economic Values</th>
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<tr>
<td>Historical and artistic</td>
<td>Market-value</td>
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<tr>
<td>Research</td>
<td>Tourism</td>
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<tr>
<td>Social or civic</td>
<td>Existence</td>
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<tr>
<td>Spiritual or religious</td>
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<tr>
<td>Symbolic or identity</td>
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Physical and geographic description
Abila locates at almost the northern end of Jordan, where is around 13 kilometres north and slightly northeast of Irbid. Geographically Abila is on the east side of the southern end of the Sea of Galilee. The whole area of the archaeological site contains of two hills that are called “tells”. The northern tell is named Tell Abila and the southern one is called Khirbet Umm el ‘Amad (“Mother of the Columns” in Arabic)—with a lower saddle area between them.

The distribution of remaining structures and geographic characters of the site is described in the Abila excavation project report as:

When the survey and excavation started in 1980 and 1982, Dr. Mare and his staff saw on a part of Umm el ‘Amad the scattered columns of what was thought to be an ancient temple, but which, on excavation, turned out to be a seventh- to eighth-century A.D. Christian church. On the northern edge of this sector the excavators saw the cavea of the Graeco-Roman “theater” which bordered the south edge of the central saddle. Part of a wall ran north across this central saddle toward Tell Abila; building ruins were also seen in the saddle area. To the west of the “theater,” north of the seventh-eighth-century church ruins, was an olive orchard, on the north edge of which were ruins of the west “bridge” or vault over a gate that was part of the north-south road which, in Roman times, was called the Cardo Maximus.

Along the south crest of Tell Abila were the remains of an ancient wall which, when excavated, turned out to be the acropolis wall of the city, originally constructed in the Iron Age (1200-586 B.C.) and added to in the Hellenistic/Greek and Roman periods. On the top of Tell Abila in its south sector were seen ruins of what at first was designated as a “public building,” but on excavation turned out to be a three-apsed sixth-century A.D. Christian basilica. Over toward the
northeast slope of the tell was found a small semi-circular cavea that may be the remains of an ancient music hall (called in Greek an “Odeon”) similar to the one in the marketplace of ancient Athens. Numerous other ruins on the top of Tell Abila, when finally excavated from 1982 to 2000, included walls, buildings, and other structures going back to 3000 B.C. through the Islamic, Byzantine, Roman, Greek, Iron, and Bronze ages. In addition, the excavation of tombs and tomb complexes in Abila’s extensive cemetery has brought to light much cultural information about the lives of the people who inhabited the site from the Bronze Age through the Byzantine period.

Tell Abila is bordered on the north by Wadi (Valley) Abila, and both Tell Abila and Khirbet Umm el ‘Amad are bordered on the east by Wadi Quailibah. The cemetery areas for the site of Abila (probably including as many as 1000 tombs and tomb complexes; we have excavated over 100 of these so far) run along the slopes of Wadi Quailibah, extending to the south of Khirbet Umm el ‘Amad about three-fourths of a kilometer, then southwest around the wadi to a perennial spring, Ain Quailibah. The waters of this spring run north in Wadi Quailibah to Abila where the excess has helped water a large grove of pomegranate trees. The water continues to flow north in Wadi Quailibah under the ancient stone bridge which connected Abila with its eastern extremity and also with cities and communities to the east and then flows on to the Yarmouk River about 5.3 kilometers north of Abila. The Yarmouk River flows west to empty into the Jordan River just below the Sea of Galilee. Further cemetery areas are found east and northeast of Tell Abila along the slopes of Wadi Quailibah and along the slope of Wadi Abila on the north of Tell Abila.
Landscape Archaeology

History

Abila is thought to be a member of a “confederation” or “league” of autonomous Greco-Roman cities called “Decapolis”, which means “ten cities” in Greek. According to the archaeological discovery in Abila, the history of human occupation at the site went through Bronze Age (Early, Middle and Late), Iron Age, Hellenistic Period, Roman Period and Umayyad Period. It can be traced back to 3000 B.C. starting with a small walled Bronze Age town.

In the third century B.C. the Macedonian settler-soldiers settled down here in the time of Alexander the Great (356-323 B.C.). These Greek colonists established the city confederation of Decapolis and tried to weaken the deeply rooted oriental milieu by their urbanization policy. The influence of the Hellenistic culture in Abila is shown by the ruins of some Greek constructions such as music hall and city wall. However, the presence of Greek population in this area caused cultural and religious conflicts between Greeks, Arabs and Jews due to their different ideas about philosophy, worship and lifestyle. Soon after the time of Alexander the Great, Abila was ruled by Jewish during the time of Maccabees.

At the time of Christ, the Roman General Pompey conquered Syria and Palestine. Abila became under control of Roman Empire in 64/63 B.C. From then on “the cities of the Decapolis flourished during the first three centuries because of the security provided by the Pax Romana, or Roman Peace.” (Khourī) Abila and other cities of the Decapolis had been always the critical places for the regional trade routes, especially after the construction of the 500 kilometres long road Via Nova Traiana in A.D. 111-114, which connected the port of Aila, modern Aqaba, with Bosra. So the cities made profit from the Near East trade and became rich. Furthermore the fertile soil, nice climate and abundant water supply made the
area an idea place for agriculture. The wealth of Abila in this period can be seen from the Roman complex in “theatre” area, the Roman bridge and a considerable amount of painted tombs of Roman period.

The cities of Decapolis continued their flourishing time as Byzantine cities during the fourth century to the seventh or eighth century until early Islamic time. The spectacular basilicas in Abila shows the influence of Christianity in Byzantine period. A water channel as a part of a large water catchment system constructed during Byzantine period was also found in Tel Abila.

Abila had been urbanized continuously by several generations and civilizations in the past 5,000 years. The research reveals that the city has been abandoned for almost 1,500 years. No proof suggests that Abila was destroyed by the Muslims. Nevertheless before the excavation of the site, Abila was unoccupied lying under the land where the Jordanian farmers cultivated and grazed their animals.
Legislation and administration background

In January of 1976 King Hussein published a new Antiquities Law (provisional 12) to replace the Antiquities Law No. 26 for the year of 1968. In this new Antiquities Law 'Antiquity' is clearly defined as:

Any object, whether movable or immovable, which has been constructed, shaped, inscribed, erected, excavated, or otherwise produced or modified by humankind earlier than the year 1700 A.D., including caves, sculpture, coins, pottery, manuscripts and all sorts of artifacts that indicate the rise and development of sciences, arts, manufactures, religions, and traditions relating to previous cultures, or any part added thereto, reconstructed or restored at a later date.

The same law also gives some regulations against illegal trading of antiquities and the penalty for any activities of destruction, damage and disfiguration of the antiquities.

Concerning the administration of the conservation of archaeological sites, the Department of Antiquities of Jordan is the official body of the government that is responsible for the supervision of all the projects and activities. "Quite a number of projects are currently taking place with the aim of conserving and presenting archaeological sites. These projects are being executed by the Department of Antiquities, in certain cases in co-operation with foreign institutions." Furthermore because of its wealth of archaeological sites and antiquities all over the country, Jordan has become the focus of many international heritage conservation organizations and foreign archaeology institutions. Currently a project aiming at the establishment of a Conservation and Restoration Centre in Petra (CARIP) is being conducted. The funding of the project is from the German Government and supported by German Technical Co-operation. The objective of the project is not only to do some actual restoration work but also to train skilled persons and build a sustaining institution that will serve both the demands of the monuments of Petra and the antiquities of the whole Jordan.

From the first discovery to the excavation of the site, Abila project has been always conducted by the cooperation of an international team. The ruins at Abila was firstly examined by a German scholar Ulrich Seetzen in 1806 and announced by him as a city with former glory. In 1888 supported by the German Society for the Exploration of Palestine, Gottlich Schumacher visited the site and confirmed it as the Abila of the Decapolis.

A survey of the site was processed in 1980 and followed by the starting of the modern excavation in 1982 directed by Dr. W. Harold Mare, Professor at Covenant Theological Seminary in St. Louis, Missouri. The excavation has been continuing every other year or sometimes annually until now. A group of international research teams from different countries such as USA, France and Germany have participated in the excavation project of Abila. Many objects, artefacts and remaining structures have been discovered and some of
them have been restored. The archaeological research project is going on and more evidences of the history of Abila are waiting to be uncovered.

Under the exploration of the archaeological treasures at Abila, its importance and significance is attracting more and more attention. In one document of ICOMOS about Jordan archaeological sites conservation, Abila was particularly pointed out as “Moreover, Qweilbeh (Abila), situated in the northern part of the country, is a huge site containing many features of Roman and Byzantine times that require some restoration and site presentation works.”

Another important administration part for archaeological site is tourism-concern. Tourism is undoubtedly a main industry in Jordan, especially after King Abdallah came in power in February 1999 prior to his father's death. He has regarded tourism to be an outstanding contribution to the Jordanian economy. Under this policy marketing of Jordan's heritage sites has increased recently. With the numerous Biblical sites in Jordan, the Ministry of Tourism expects to attract a lot of western visitors for religious travel. There is no real tourism activities at the Abila site at the moment. Undoubtedly Abila is a potential tourists attraction with its wealth of ancient ruins and its mysterious history related to Bible stories. Meanwhile it is quite easy to put Abila into the trip arrangement since it is quite close to other famous Decapolis cities such as Jerash, Umm Qais and Pella.
Understanding of the Site

Value analysis

As I mentioned in the introduction part, the values of heritage sites are normally separated to two main categories, socio-cultural and economic. Certainly this is true concerning the conservation and development planning for the site. But another way based on the stakeholders analysis is also getting popular. The values are distinguished according to the motives of stakeholders, which decide their attitudes to the site. Historical and artistic, educational and research values are core values defined by professionals in a more academic way. Social or civic, spiritual or religious, symbolic or identity, economic values are more related to the people who have emotional association or physical, material relations with the site. Practically the latter values, which are relatively ignored in traditional conservation management, deserve more sufficient consideration in the significance assessment.

- Socio-cultural values

Historical and artistic

Historical and artistic values are in a way the root of all other values attached to archaeological sites. They are the essential elements of the sites that tell us what happened and what was created at the sites in the past. They are specially interesting for archaeologists, historians, art historians and other scholars, who make their professions relying on the archaeological sites. Meanwhile they are also the basic values that decide the significance of the sites and guide the decision making concerning conservation issues. The more intervention planned, the more important is to define what are the historical and artistic values and where are they embodied.

For Abila, the historical value lies in all the historical periods it experienced and showed by the features, remaining structures, design elements, materials, technology and historical records. The site shows a history that can be traced back to a time before Abraham, Isaac, and Jacob. It can be seen at Abila how the city originated, developed and disappeared from Bronze Age (Early, Middle and Late), Iron Age, Hellenistic Period, Roman Period until Umayyad Period in almost 5,000 years. The site provides a clue and an image of former existence of Greek, Roman and Islamic civilizations in ancient Near East.

Artistically Abila contains some outstanding pieces of artwork from Roman and Byzantine time. Claude Vigert-Guigue highly evaluated the artistic significance of the painted tombs of Abila as “The painted tombs of Abila are not only the fine examples of Roman period
painting but they provide valuable material for the comparative study of frescoes of the Roman world”. Furthermore the ruins of basilicas from Byzantine time at Abila is “one of the most spectacular and peculiar basilicas at Abila as well as the country of Jordan”.

Research

“Research value is the potential of a site to yield new information and answer research questions.” This value is particularly important for archaeological sites. Research value is somehow undiscovered or unknown value compared to other values. Normally people pay more attention to the conservation of visible or revealed values than the potential value of future exploitation of information. For an archaeological site with high research potential, the research value is often threatened by looting, improper excavation activities, agricultural cultivation and erosion which need to be carefully considered in the management plan of the site.

The relevant research has proved that Abila belonged to the city confederation, Decapolis. So the archaeological study and excavation at Abila are crucial not only for understanding the history of the site itself but also to reveal the development of the whole Decapolis region in different periods. There are still many questions waiting to be answered and fascinating history to be uncovered by archaeological research. For example, why the city Abila was finally abandoned? When and how?

Social or civic

“The social values of heritage enable and facilitate social connections, networks, and other relations in a broad sense, one not necessarily related to central historical values of the heritage.” A site may function as a place for recreation, public ceremony, or meeting point. It can also be important for regional or national pride or political sentiment. These values build up a connection between the archaeological sites and the local communities. An important value in this category is the educational value, which can be a good way for the archaeological sites to serve a greater social purpose.

The main area of Abila is still under excavation and not possible to allow any public activities there. But the Abila archaeological project provides opportunities for both Jordanian students and students from foreign countries to participate in the excavation work under the supervision of the scholars. The students can get credits for their work and learn from first-hand experience.
Some tour operators have already noticed the potential attraction of Abila for both tourists and local public activities. In the advertisement Abila is described as “Like so many other ancient cities in Jordan, Abila is well sited on open hilltops surrounded by lush valleys. It makes an ideal picnic spot today, and can be combined with an all-day trip that also takes in Jerash, Umm Qais and Pella.”

Spiritual or religious

“Spiritual or religious values are associated with spiritual or religious aspirations of diverse groups, and may be manifested in a traditional or contemporary manner.” The evaluation of these values depends much on the ethnic group, especially considering the relation between the site and the local population. Sometimes the values can promote the conservation of the site. But sometimes they may cause conflicts and damage to the site.

Abila is a Bible land city, which means it is very important for Christian community. It was recorded in the Bible that Jesus has ever visited the Decapolis, maybe also Abila. “Then Jesus left the vicinity of Tyre and went through Sidon, down to the Sea of Galilee and into the region of the Decapolis.”

Symbolic or identity

“Symbolic or identity values are the means by which specific groups claim their place in the world through a spiritual and cultural connection with sites, or these values may assert or symbolize a community’s ethnic or cultural identity.” These values have the same problem as the spiritual or religious values, the original people who created the site and the local population who have control on the site are not with the same origin. It is a political reality in many countries, which needs to be specially considered in the management plan of the site.

Abila has been identified with strong features of Roman and Byzantine time, and some impacts from Greek civilization. It was actually abandoned at the beginning of the Islamic time. Now Jordan is an Islamic country with most population as Arabic people. From this point of view, Abila has no real symbolic or identity values for the local people.

- Economic values

Economic values of archaeological sites have long been somehow excluded by the academic professionals. Actually economic valuing is one of the most powerful ways in which many major stakeholders such as local society, business interests and government departments identify the value of archaeological sites. When we talk about economic values, it is
impossible to separate them from the socio-cultural values described above. Economic values are derived from and depend on all the socio-cultural values. Meanwhile, the socio-cultural values are also measured in the economic analysis of archaeological sites. In other words, economic values are different because the concept of evaluation of economic values is in a fundamentally different way as of socio-cultural values. But the base for these two categories of values is the same, the existence of the sites.

"According to neoclassical economic theory, economic values are the values seen primarily through the lens of individual consumer and firm choice (utility) and are most often expressed in terms of price." However for the archaeological sites not all the economic values can be calculated with market price. And there are also differences between the private market values and the public collective values.

In a sense the economic values of the site of Abila have not been officially evaluated. They are depending mainly on the antiquities at the site and the potential possibility of tourism development. For the local people the antiquities from the site, especially from the tombs are a quick way to earn money. So robbery of the tombs and looting are a severe threat to the site. This I will talk about later in the threats analysis. For the government, to make Abila as a tourists site for western visitors, both archaeologists, historians and normal tourists is the main target for the future development of the site.

**Stakeholders**

The stakeholders for archaeological site management are the people who have interests in the use, development, preservation of the site, who can impose influence on the site, who are related to the site in different ways. Typically the stakeholders can be identified as following:

- Government agencies, such as environmental agencies, tourist agencies, religious authorities, or nongovernmental organizations (NGOs) with an interest in the site;
- Archaeologists and other researchers who have done significant work at the site;
- Groups with an affinity or ancestral relationship to a site, such as Native Americans in the United States;
- Local community members who benefit economically or who want to use the site for commercial or social purposes; or conversely, who may be adversely affected by the site as a result of land disputes or influx of tourists and traffic;
- Private tourist agencies representing the interests of tourists and local or regional business interests; and
- Specialized tourists, such as religious tourists or pilgrims, or groups who come in large numbers and may have special requirements or may impact the site.
For Abila, the main stakeholders can be defined clearly as:

- Local people living in the villages nearby the site, who relate to the site directly and affect the surrounding environment of the site;
- Government, represented by different official bodies, including the Department of Antiquities with the responsibility of preservation and management of the site; the Ministry of Tourism with an interest in tourism development and so on;
- Archaeologists from Jordanian and international institutes, among which the excavation team at Abila is of particular importance for the site preservation;
- International organizations and aid agencies that are anxious to contribute to research at the site as well as to the preservation of the site;
- Tour operators, tourism business makers, who have an economic interest in the site;
- Tourists;
- NGOs.

The interests of these stakeholders are often inconsistent and mostly competitive, which generate discord and tension among the various groups that needs to be managed to avoid open friction.

**Threats and opportunities**

Nowadays almost all the cultural heritage in the world is threatened by economy development and modernization process. Archaeological sites are particularly sensitive and fragile to the changes of environment and the physical interventions. The main threats and challenges to the archaeological heritage are as following:

- **Threats**

  The impact of development

  It is inevitable that the cities and regions need to develop, industrialization, transportation system, infrastructure, commercial area, and construction expanding. This will cause land contest and considerable disturbance to the existing status. The archaeological sites may be directly damaged or destroyed in the construction process, or indirectly influenced by the pollution and the by-products of development.

  For Abila, because the site is not closely adjacent to a modern big city, the main development pressure comes from the agricultural activities and the development desire of the village people in the area around the site.
Tourism

Now there has been no tourists at Abila. But according to the tourism development plan of Jordan government, Abila will probably be included in the tour planning of Bible land cities. Thus some measures need to be taken to solve the problems of demand of tourists service facilities, negative impacts from tourists to the site, invasion to the historical ambience of the site and pollution and the by-products of tourism.

The impact of social unrest on cultural heritage

Jordan locates in the Middle East area and just adjacent to Israel. Due to the unstable situation in this area, the archaeological sites may be threatened by the possible armed conflicts between Arabic and Jewish people. Abila is not exactly on the border but near the northern end of Jordan. So there is a danger for the site to be involved in some military activities.

The problem of looting

Looting is always a problem for the archaeological sites, especially when more and more people realized the high value of the shabby-looking antiquities. At Abila the nicely painted Roman and Byzantine tombs have long been the targets of grave robbers. When Dr. W. Harold Mare and Sultan Shureidah were checking the site to prepare for the second campaign of the American expedition in 1981, they found the local inhabitants exploring a recently robbed tomb. Then the villagers showed them other robbed tombs nearby. This situation arose the attention of the Department of Antiquities and some experts were immediately sent to Abila to examine and protect the tombs. But it is always better to prevent looting and robbery beforehand than to respond to a bad situation.

Archaeological excavation and inappropriate interventions

On the one hand excavation is necessary to reveal the history of Abila and show the site to the public. On the other hand excavation can be a damaging factor to this archaeological site. At first the exposure of the remaining structures and artefacts to the air results in the erosion, which is not so a problem when they were buried under the earth. Secondly the poor excavation strategies may cause irreversible damage to the site. This includes the inappropriate restoration, rebuilding of the structures at the site. Thirdly without proper guarding, excavation will make it easier for the robbers to get the antiquities. Now the Abila excavation project is going on well under the direction of many international scholars and the
support from Jordan government. But still a more integrated and comprehensive management plan is needed to guide the administration of the site.

Table 3. Conventions and Charters about Archaeological Sites Conservation

<table>
<thead>
<tr>
<th>Convention</th>
<th>Year</th>
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<tbody>
<tr>
<td>Convention for the Protection of Cultural Property in the Event of Armed Conflict</td>
<td>1954</td>
</tr>
<tr>
<td>Recommendation on International Principles Applicable to Archaeological Excavation</td>
<td>1956</td>
</tr>
<tr>
<td>Recommendation Concerning the Safeguarding of the Beauty and Character of Landscapes and Sites</td>
<td>1962</td>
</tr>
<tr>
<td>The Venice Charter: International Charter for the Conservation and Restoration of Monuments and Sites</td>
<td>1964</td>
</tr>
<tr>
<td>Recommendation on the Means of Prohibiting and Preventing the Illicit Import, Export and Transfer of Ownership of Cultural Property</td>
<td>1964</td>
</tr>
<tr>
<td>Norms of Quito: Final Report of the Meeting on the Preservation and Utilization of Monuments and Sites of Artistic and Historical Value</td>
<td>1967</td>
</tr>
<tr>
<td>Convention Concerning the Protection of the World Cultural and Natural Heritage</td>
<td>1972</td>
</tr>
<tr>
<td>Cultural Tourism</td>
<td>1976</td>
</tr>
<tr>
<td>Recommendation for the Protection of Moveable Cultural Property</td>
<td>1978</td>
</tr>
<tr>
<td>The Vermillion Accord on Archaeological Ethics and the Treatment of the Dead</td>
<td>1989</td>
</tr>
<tr>
<td>Charter for the Protection and Management of the Archaeological Heritage</td>
<td>1990</td>
</tr>
<tr>
<td>Charter for the Conservation of Places of Cultural Heritage Value</td>
<td>1992</td>
</tr>
<tr>
<td>Resolution on Information as an Instrument for Protection against War Damages to the Cultural Heritage</td>
<td>1994</td>
</tr>
<tr>
<td>Unidroit Convention on Stolen or Illegally Exported Cultural Objects</td>
<td>1995</td>
</tr>
<tr>
<td>Charter for Sustainable Tourism</td>
<td>1995</td>
</tr>
<tr>
<td>Final Communiqué of the NATO-Partnership for Peace Conference on Cultural Heritage Protection in Wartime and in State of Emergency</td>
<td>1996</td>
</tr>
<tr>
<td>Recommendation on Measures to Promote the Integrated Conservation of Historic Complexes Composed of Immovable and Moveable Property</td>
<td>1998</td>
</tr>
<tr>
<td>International Cultural Tourism Charter: Managing Tourism at Places of Heritage Significance</td>
<td>1999</td>
</tr>
</tbody>
</table>

Source: Adapted from Getty Foundation:
http://www.getty.edu/conservation/research_resources/charters.html
- Opportunities

Although Abila as an archaeological site in Jordan is threatened by the possible impacts listed above, there are at the same time some opportunities to achieve a good site management at Abila. At the international level, a series of conventions and charters have been made to provide basic principles for the conservation of archaeological sites. (see Table 3)

At the national level, the government of Jordan has realized the importance of integrating heritage conservation into the whole administration system, especially in tourism development strategy. According to the action plan 2005 of Jordan National Tourism Strategy 2004-2010, some measures will be taken to protect traditional attractions.

4- Changing Jordan’s over reliance on traditional attractions

- Diversify products to cater for different ‘clients’, explore non-traditional sites and identify how to network these with the traditional sites;
- Modernise services of sites (transport etc.);
- Introduce new events and more sophisticated entertainment packages;
- Identify carrying capacities & set a careful management plan to sustainably manage newly discovered sites to promote sustainable tourism;
- Increase involvement of the private sector in the diversification of the product and in investing in tourism projects;
- Create partnerships with other governmental sectors.
Proposed Management Policies for the Site of Abila

Abila is a huge archaeological site, which is still in excavation and not disturbed by any recreation or tourism activities. So it is in a nice pre-condition for a sustainable management plan to guide the future preservation and development of the site. Based on the analysis in the other sections, a series of suggestions can be made for the policy making and management planning of the site.

- Completion of legislation and regulation system. In order to govern the use of the site, to guide the excavation and conservation intervention at the site and to avoid the possible damaging activities such as looting, robbery, stealing etc. a more detailed and practical legal system with laws, regulations, rules at both national and regional levels should be made.

- A proper research and excavation strategy. Until now the most disturbing activity to the site of Abila has been the excavation carried on by foreign scholars. The excavation strategy should examine the excavation methods to reduce the amount of exposed fabric and artefacts. Some significant parts of the site, which are still unexcavated should be treated carefully or be left undisturbed. Small-scale testing may be processed to answer certain research questions. Research that is not destructive to the site and provides an enriched interpretation of the site should be encouraged.

- Encouraging of the participation of local government and local community. Now the main entities involved in the research and preservation of Abila are central government of Jordan, international organizations and foreign institutions. The participation of the most direct interest group who is affecting and being affected by the site is crucial. It will greatly improve the preservation of the site. Certainly this needs to be accompanied by the promotion of public education.

- More measures for regular monitoring and maintenance of the site. After excavation the site needs more careful maintenance to protect the ruins and artefacts from erosion and other natural or man-made damage.

- Before any tourism promotion activities are processed at the site, a sustainable tourism development plan and visitors management plan should be considered to reduce possible problems in the future.
This value-based analysis of the case study of Abila in Jordan is mostly based on the review of literatures from books and internet sources concerning the theory of archaeological sites conservation, introduction and explanation of the history and excavation project at Abila, legislation and administration system in Jordan. The purpose of the paper is to provide a possible theoretical way to analyse an archaeological site extensively and holistically, which may be able to contribute to any advanced discussion about the conservation and management of archaeological sites.
Notes:
1. Mason, Maclean, 2002, p1
   (10th November 2004)
    (10th November 2004)
15. Mason, 2002, p12
17. Jordan National Tourism Strategy 2004-2010

Sources of figures:
Figure 1: http://www.mideastweb.org/mjordan.htm (8th November 2004)
Figure 2: http://www.abila.org/html/sitemaps.html (26th November 2004)
Figure 3: http://www.ushistoricalarchive.com/photochroms/ppmsca/02743t.gif (26th November 2004)
Figure 4: http://perso.wanadoo.fr/claudie.philip/Pays/jordanie/images/abila.jpg (26th November 2004)
Figure 5: http://www.abila.org/html/decmapmap.html (26th November 2004)
Figure 6: http://www.abila.org/html/aa1_b.html (1st December 2004)
Figure 7: http://www.abila.org/html/theater.html (1st December 2004)
Figure 8: http://www.abila.org/html/e4_b.html (1st December 2004)
Figure 9: http://www.abila.org/html/h4_b.html (1st December 2004)
Reference:


