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INDUSTRIAL HERITAGE TOURISM AS A SPECIAL INTEREST TOURISM FORM.  
THE CASE OF THE PREFECTURE OF MAGNESIA IN GREECE

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ABSTRACT

Cultural heritage plays a crucial role in increasing the attractiveness of a tourist destination. The concept of cultural heritage is increasingly expanding as the element of industrial heritage has been integrated into it. Today the industrial heritage is put forward in order to create tourist flows and in many cases it acts as a catalyst for tourism policy and development. In Greece, private and public institutions have started taking an interest in the protection and conservation of the industrial heritage.

This paper seeks to study, through a field study and interviews, the conservation and tourism valorization of the industrial heritage in the prefecture of Magnesia in Central Greece, one of the richest areas in industrial heritage assets in the country. A primary survey was carried out focusing on three industrial monuments of socio-cultural importance in the prefecture of Magnesia.

The objective of this paper is to demonstrate that using industrial heritage resources nowadays can combine apparently conflicting notions such as "[e]ducation and entertainment, conservation and regeneration, culture and commerce" (Alfrey & Putnam, 1992: 42). In addition, it aims to show that industrial heritage tourism in de-industrialized can lead to sustainable development by providing economic, social and environmental prosperity.

Key words: cultural heritage, industrial heritage, sustainable development, Magnesia, Greece

1. INDUSTRIAL HERITAGE AS A TOURIST ASSET

Heritage consists of what is passed on to us from the preceding generations and involves an intellectual, cultural or material wealth (Jamieson, 1994; Tomlinson, 1991; Richards, 1996). According to the Convention Concerning the Protection of the World Cultural and Natural Heritage (UNESCO, 1972), the following are considered as 'cultural heritage': monuments, groups of buildings, sites, urban complexes, cultural landscapes, industrial monuments and works of art (Mylonopoulos, 2007). Cultural heritage includes not only objects for conservation and museification but also historical routes within which act solid systems of values (Kalogri et al., 1986).

Industrial heritage is an integral part of cultural heritage, which in turn is the major component of the sustainable development of a society (Mitzalis, 2007). According to the Nizhny Tagil Charter for the Industrial Heritage adopted by TICCIH in July 2003, “[I]ndustrial heritage consists of the remains of industrial culture which are of historical, technological, social, architectural or scientific value. These remains consist of buildings and machinery, workshops, mills and factories, mines and sites for processing and refining, warehouses and stores [...] as well as places used for social activities related to industry...”.

Culture and tourism are closely linked, the one supporting the other, as those who travel to a destination often search to get to know its culture. The first recorded people’s movements in ancient Greece were the tours whose purpose was the familiarization with other cultures (Thalis, Anaximandros, Herodotus, Plato, Stravon, Pausanias and others). Cultural tourism is regarded as the oldest form of tourism. “Visiting historic sites, cultural landmarks, attending special events and festivals, or visiting museums have always been a part of the total tourism experience.” (McKercher & Du Cros, 2002:1).

Cultural tourism is on the one hand, “the most effective tool to comprehend and promote the cultural identity of a country or an area, which contributes to the economic and social development of the less developed regions”; on the other hand, it is a sustainable form of tourism since “it does not exert an ‘oppressive pressure’ on the natural, social, human and built environment, which often result in its ‘alteration’, as the other traditional forms of tourism do” (Moir, 1998:190; Moir, 2009:23). This form of tourism began to be considered as a special interest tourism form in the late 70s when tourism scholars ascertained that a good number of people travelled in order to understand the culture and the cultural heritage of the place they visited (Tighe, 1986:2-5). This recognition started to be integrated in international documents such as the Manila Declaration on World Tourism (UNESCO, 1980), according to which natural and cultural values are ‘the fundamental attraction of tourism’ (Article 18) and this is why their respect and conservation are indispensable.

Later, the Mexico Declaration on Cultural Policies (UNESCO, 1982) broadened the notion of tourism, defining it as “the whole complex of distinctive spiritual, material, intellectual and emotional features that characterise a society or social group. It includes not only the arts and letters, but also modes of life, the fundamental rights of the human being, value systems, traditions and beliefs” (UNESCO, 1982:1-6). In 1985 the World Tourism Organization proposed two definitions of cultural tourism. The narrow one states that cultural tourism is the “[m]ovements of persons for essentially cultural motivations such as study tours, performing arts, and cultural tours, travel to festivals and other cultural events, visits to sites and monuments.” The wide definition includes “[a]ll movements of persons [...] because they satisfy the human need for diversity, tending to raise the cultural level of the individual and giving rise to new knowledge, experience and encounters” (WTO, 1985:6; Richards, 1996:23).

In fact, it is difficult to give a definition on cultural tourism. This is due to its many dimensions, tangible and intangible such as the works of art, the language, the gastronomy, art and music, architecture, historical sites and monuments, festivals and cultural events, religion, education, etc. In different countries the responses to the question about what industrial heritage is and what its management includes vary and prove that industrial culture as cultural heritage is perceived in a different, subjective way depending on the individual’s knowledge, experience, aesthetic values and the degree of industrialization of the country they reside. More specifically, industrial heritage may be (Alfrey & Putnam, 1992:1) piecing together the remnants of long-lost industry, protecting and caring for buildings, sites and machinery, finding new uses for redundant but irreplaceable elements of the industrial landscape restoring disused machinery and working practices to use, recording the knowledge, skill and experience of industrial populations, using the results of the above to show how past generations lived and worked.

Alfrey and Putnam (1992:1) claim that “[e]ach of these activities involves constituting a resource [...] for one or more uses (study, care, representation)” and that “[m]aking the industrial heritage involves managing the relationship between a range of such potential resources and their possible uses”. More specifically, industrial buildings, workers’ residences, means of communication

and transport and machines-tools. The German industrial archeologist Rainer Slotta uses the term 'technical monument' which means "the physical remains of the industrial, economic and technical development in the widest sense of the terms. These include machinery, equipment and installations, buildings and sites of production, which can clarify and explain the historical evolution and the respective working conditions in the fields of production and treatment of raw materials, trade, transport, public utilities networks and disposal of the remains" (Slotta, 1990/1991:3,7).

## 2. THE VALORIZATION OF INDUSTRIAL HERITAGE IN THE PREFECTURE OF MAGNESIA GREECE

Greece is a country without a rich industrial past due to late industrialization (second half of 19<sup>th</sup> c.) compared to the rest of Europe and offers an original and unique small-scale preindustrial and industrial heritage which is directly linked to the ancient history of Greece. Over the last years initiatives on valorizing and promoting industrial heritage have been growing bigger. The Piraeus Group Cultural Foundation (PGCF) supports significantly this effort. However, with the exception of the PGCF thematic museums and some others, the presentation/interpretation of the exhibits in the industrial/technical museums/sites is static and is done in a conventional way, which does not draw the visitors' interest as there is no use of new technologies (e.g. interactive touch-screen kiosks, video-walls, 3-D animation). Nevertheless, as Maria Economou (2006) argues, museums cannot afford to shy away from new technologies, and as this wave spreads they need to make informed decisions about the appropriate use of these powerful tools in the reshaping of exhibition, education and interpretation practice.

Moreover, access to the museums is impeded because of the geographical terrain of Greece, its geographical position in the southeastern part of Europe and its insularity which, coupled with a not sufficiently developed domestic transport network (rail, road, maritime), drive to the remoteness and inaccessibility of some geographical areas. On the other hand, there is often a long distance between the different museums/sites, and as a consequence, people find it difficult to visit more than one or two at a time. Here the main point is that none of the existing industrial/technological museums/sites is a primary and in most cases not even a secondary cultural attraction – able to attract visitors to an area by itself, with the exception of the Open Air Water Power Museum in Dimitsana, which due to its proximity to Athens is a popular destination for people who can spend there a day or a weekend.

Therefore, it is judged essential to plan a strategy in order to convert the existing cultural resources, -in this case, industrial heritage- into cultural tourist attractions as well as education sites if what we really wish is to attract visitors and not simply to increase their number but the diffusion of the economic benefits to local communities.

This paper seeks to examine the conservation and tourism valorization of the industrial heritage in the Prefecture of Magnesia in Central Greece. More specifically, this survey focuses on two industrial monuments with a particular socioeconomic dimension. These are the N. & S. Tsalapatas Rooftile and Brickworks Factory (1925) in Volos, which operates as a multi-function venue (i.e. museum of industrial history, conference venue, cultural activities and leisure venue), and the steam train of Mt. Pelion (1894-1903), the project of Evaristo de Chirico, an Italian engineer, which joins the city of Volos to the village of Milies, covering a total of 28 kilometres.

### 2.1. Tsalapatas Rooftile and Brickworks Factory

The rooftile and brickworks factory [1] was constructed in 1925 by Spyridon and Nikolettos Tsalapatas Bros under the instructions of Belgian engineers in an attempt to build a factory with a cutting edge technology, which would meet the needs of the wider area of Thessaly in bricks and rooftiles. These products were the springboard for the housing development of the region of Thessaly. The rooftiles and the bricks of the factory were famous designated products of origin. This was due to the fact that the raw materials came from the area of Diminio, close to Volos, and left the industry as a final product ready for distribution and sale in the market. The brick factory comprises 22.65 hectares in the urban site and includes a block of buildings of 7,600 sq.m. and deckhouses of 4,900 sq.m.

The particularity of the factory lies in its capacity to generate electric power in order to set its machines in motion, long before the area of Volos was connected to the electricity network. The importance of this industry for the history of the area of Volos is complemented by another feature of the factory, the use of a wagon for carrying the raw materials to the factory as well as the products to the port with the aid of a Decauville locomotive, of French construction, which dates from 1908. Moreover, the furnace is a historic sight, of unique architecture and technique. The factory deprived of the possibility of flexibility which would allow it to adapt to the new reality, began to decay and closed down in 1975.

Today the Tsalapatas plant is owned by the Municipality of Volos. In the framework of the European Initiative URBAN, the Volos Municipal Enterprise for Urban Studies-Construction and Development (DEMEKAV) has implemented the restoration works of the factory complex. The operation of the restored factory complex as a Center of Cultural Heritage and Modern Formation was discerned in two Units:

- Unit A, concerning the operation of the Industrial Heritage Museum was assumed by the Piraeus Bank Group Cultural Foundation, as a contractor for 50 years and
- Unit B, concerning the operation of the commercial and recreation spaces was assumed by the Enterprise GEK ERMHS, as a contractor for 30 years.

In 1995 the Hellenic Ministry of Culture declared the former factory complex as a cultural heritage monument (Mylonopoulos and Parthenis, 2007: 533).

After the necessary restoration works in the premises of the monument, it operates today as a museum of itself bringing to life the historic past of the industry and the society as it becomes accessible to the visitor in a direct and tangible way. This goal is achieved through the organization of a series of cultural events, international and national conferences.

Various age groups visit the museum. In the framework of two educational programmes, the first of which is under the auspices of the Hellenic Ministries of Culture and National Education, and the second one entitled “Industrial heritage: Tsalapatas Rooftile and Brickworks factory”[2], visits from primary and secondary education students take place in it. So although the number of visitors during January and February is low, it starts increasing during the period from March to May, due to local visitors and the implementation of the educational programmes. During the summer months the museums receives foreign tourists as well who spend their holidays on Mt. Pelion.

According to the data collected, the senior population of the area is aware of the monument, as the past of their personal lives joins empirically that of the industry. These people sought for the raw material from the products of the factory in order to possibly repair their houses or build the residences which would lodge their children’s families. However, the younger people have unclear knowledge of the existence and history of the monument, while students of primary and secondary education seem to have deeper knowledge about the concept of industrial heritage and its importance, thanks to the aforementioned educational programme implemented by PBGCF.

The survey brought to surface a held back element which needs to be further studied and concerns the differentiated behaviour of foreign and local tourists vis-à-vis the industrial monument. Foreign tourists have a vivid interest in coming into contact with the industrial museum, while the local tourists’ interest awakened just recently. This is not an accidental fact. On the contrary, this is due to the presence of the machine for many years which determined decisively the socioeconomic structures of the western world and through industrial heritage it shaped the industrial culture of the Europeans. Thus the industrial monument becomes a strong attraction for foreign tourists, because their culture, their education and their tradition have made them more aware of the significance and the importance of industrial heritage. Consequently, they visit the industrial museum having more crystallized motives and clearer intentions about the benefit they will obtain from this visit.

Through the interview the internal as well as the external factors affecting the success and the promotion of the industrial monument as a tourist resource come to light. A crucial factor for success appears to be the integrity of the industry, whose machinery and machine parts are in their original

place giving the impression that it is about to start operating, demonstrating in this way all the stages of the production of the roof tiles. Moreover, the geographical position of the town of Volos is an advantage which can draw tourists' interest to visit this industrial monument. It is situated in the centre of continental Greece in equal distance from Athens and Thessaloniki, which make it accessible with all means of transport. Moreover, there are regular and charter flights operating from the International Airport of Nea Anchialos (VOL), 26 km away from Volos.

In addition to this, the proximity of Volos to the Mt. Pelion, one of the most popular destinations due to its natural beauty, combining mountain with sea scenery, is an asset for the promotion of the museum. Support programmes based on the local communities, the economy and the urban environment like the Regional Operational Programme of Thessaly aiming at upgrading and smartening up the surrounding area of the museum also contribute to the attractiveness of the museum. The design of cultural and industrial routes in the region, the Tsalapatas museum being the core, adds to its attractiveness as a tourist attraction. Furthermore, the prospect of the creation of an ecomuseum in the Pagasitikos Gulf, which will integrate the dynamic action for the protection, promotion and management of the industrial heritage, is an opportunity for the monument to increase its visitor numbers.

The museum is close to Kravsidonas torrent, which is likely to turn into a threat due to the lack of flood controls in case of the river overflowing. As a counterweight, the PBGCF has placed special sandbags around the museum, but its effectiveness is temporary. Another problem facing the museum is that the local authorities leave the monument unguarded during evening hours. As a result, industrial exhibits (e.g. the Decauville steam engine, wagons, products, etc.) of priceless historical value, found in the museum yard, are left unprotected and are likely to be damaged. The risk is high as within the premises of the factory complex apart from the Industrial Heritage Museum there is also a restaurant and a leisure venue, which are privately managed and there is no monitoring or control.

The PBGCF is making an effort to record the range of the problems and the likely shortages and failings, which may impede the proper operation of the industrial monuments in Greece and address these problems by conducting surveys. These efforts are expected to contribute to the enhancement of the attractiveness of the industrial monuments in general.

## 2.2. The Mt. Pelion train [3]

The Mt. Pelion train started operating in 1895, when the first rail track of its first trip was inaugurated, linking the port of Volos to the village of Lechonia. In 1903 the line expanded and reached the village of Milies, a fertile and rich agricultural area of Mountain Pelion. Its operation marks the start of a new era when revolutionary changes occur in the society, economy, technology and culture of the region. The transport of merchandises, with pack-animals through rough and unsafe paths, was replaced and the people's movements were facilitated by the line designed by Evaristo de Chirico. The tracing of the new line Volos-Milies coupled with the development of the flour industry in Volos allowed the train to supply the mountainous villages with the necessary grain. Its additional function as a tramway line in Volos and the wider area of Mt. Pelion was a good solution to the transport needs of the area.

The train is owned by the Hellenic Railways. However, there are no coordinated actions by the owners and the competent authorities, which could contribute to broaden the use of the train, covering for instance the current transport needs of the area while keeping at the same time its historical character. This is made difficult not only by the fact that modern man has a generalized passion for speed but also by the fact that there are no initiatives aiming at promoting the train as an international tourist attraction with the aid of EU funding and financial tools. Its current operation has generated two posts of mechanics, three posts of external partners who maintain the rails for the smooth operation while two locomotive firemen start the engine. For them this is a pleasant task and they do not see it as a job.

The interview conducted revealed that the majority of the visitors are not individuals but organized big or small groups. Moreover, students from the area often do this trip with the train as a recreational activity in the framework of educational programmes aiming at raising students'

awareness of industrial heritage, which will help them connect with the recent industrial past of their country. In addition, cultural societies or clubs of the area choose Milies as the venue of celebration of personal or historical anniversaries and use the train to go there. What is remarkable is that local families of people about to be married choose the train in order to transport the bride, which shows that they continue to consider it, like in the past, as part of their daily life. Furthermore, a lot of families choose to make this trip as leisure at the weekends, while foreign tourists also make this trip. During the winter, the numbers of visitors is too low whereas in spring it starts going up reaching the peak in summer and falling again in autumn.

According to the findings of the survey, the strong features of the small train which have made it a tourist attraction of historical importance are the following: first, its locomotives and wagons are a rolling-stock of priceless museum value. Then the technical projects along the line which have a unique aesthetic value and fit harmoniously with the picturesque varying landscape (forests, mountains, orchards, sea) and the Pagasetic Gulf being the background. The railway stations along the line were renovated in 1996 and 1997, sticking to their original form along with the bridges, the tunnels, the antilandslide buttresses, the cobbled roads and the arches, are remarkable monuments of the industrial architecture and engineering of that era. At the same time the fact that it combines three different kinds of railways along the line, that is tram for the town, peri-urban tramway line for the coastal section of the western side of Pelion and mountain railway for the last kilometers before the terminal station of Milies, in conjunction with what was mentioned earlier push it forward as “an international railway treasure”.

However, the disadvantages are the high cost of the ticket for the total trip, which discourages Greek families and possibly foreign families to enjoy the unique ride with the historic train. Moreover, the cost of maintenance of the whole infrastructure is high and the know-how on how to repair the initial steam engine, built in 1903, is insufficient. The replacement of the old steam engine with a diesel engine today, although it imitates the roaring it alters to a certain extent the authentic character of the ‘grimy-faced’ train which left the smell and the colour of the coal on the passengers’ hands and faces.

The geographical position of the monument in central Greece, the port of Volos, the airport of Nea Anchialos make it easily accessible to visitors. In addition to this, its vicinity to the Mt. Pelion, with the traditional villages and the rich vegetation, and the island complex of Sporades (Skiathos, Skopelos, Allonissos) make it a major tourist attraction. The monument can be further promoted through the Regional Operational Programmes of Thessaly and other financial instruments (e.g. locomotives and tracks maintenance, wagons repair). Cultural and industrial routes can also integrate it.

The main threats for the existence of the museum is the lack of interest on the owners’ part to protect the historical significance and promote the monument as a tourist attraction and the absence or feeble existence of proposals for its reintegration of the traditional train to the daily commercial life of the town and its suburbs by the state agencies.

The interview allowed to fully record the current situation of the specific monument as well as its prospects for its future valorization as a tourist resource. What is puzzling is the fact that an inestimable industrial ‘treasure’ remains inadequately valorized, which under different conditions would attract millions of railway fans. The question why this monument is not used as an original and graphic medium to instil the local history of the last one hundred years to the future generations remains unanswered. Through schematic information, children and visitors can imagine the train during the crucial period of World War II carrying soldiers, wounded people from the battle front and drugs, saving the residents of Mt. Pelion from hunger as it facilitated bartering mountain products (e.g. olive oil) for products from the plain (e.g. grain) and carrying camouflaged guns, documents and munitions for the continuation of the resistance fight (Nathenas and Karathanou, 2005:130-132).

### 3. THE SURVEY

The second part of the survey was based on the answers to questionnaires distributed to 42 students of the 4<sup>th</sup> and 6<sup>th</sup> grades of the Primary School “Panagiotis Katsirelos” in Nea Ionia, Volos, in

the framework of the programme “Industrial Heritage: Tsalapatas Factory”, which is implemented by PBGCF in collaboration with the Makrinitisa Centre for Environmental Education. The programme has followed the recommendations of the Nizhny Tagil Charter for the Industrial Heritage (July 2003) and more specifically, article 6, par. II: “Specific educational material about the industrial past and its heritage should be produced by and for students at primary and secondary level” and its aim is to raise public awareness about the importance of protection, promotion and valorization of industrial heritage for the local community and economy. Through this programme, students learn about the launch of the industry, the changes it brought to the environment and the architecture of their region as they explore the way their ancestors lived and worked and how all these factors crucially affected the historical course and face of their hometown. Searching for this information aims to raise awareness among the younger generation about the past and its significance for the conservation of the historical collective memory as an element indicating the educational and cultural level of a nation.

The escalation of the questions sought to see to what extent the fundamental concepts of culture and industrial heritage have been incorporated into the students’ linguistic repertoire and to what degree the cognitive clarification of these concepts has led them to acknowledge the importance of industrial heritage as a main component of culture and thus of the historical and cultural identity of their native place.

More analytically, the first question (Q1), whether the students knew what culture is, aimed at exploring to what degree they could approach the concept of culture as it is a complex notion composed of many aspects of the organized social life and contributes dramatically to the shaping of a people’s history.

The concepts of ‘nation’ and ‘people’ got the majority of the responses (11.9%), followed by the manners and customs (9.5%). The categories ‘arts’, ‘industrial buildings’, and ‘cultural heritage’ got 7.1% each, while the categories ‘cultivation’, ‘museum’, sciences’, ‘town’, ‘world’ and ‘language’ got 4.8% of the replies. Finally, the headings ‘family’, ‘residents’, ‘politics’, ‘architecture’, ‘letters and traditions’, progress’ and ‘works of art’ received 2.4% of the responses. The students’ spontaneous answers to the question reveal that although the concept of ‘culture’ is not fully clarified in children’s minds, students can approach at least the fundamental aspects and components of culture.

The aim of the second question (Q2) was to investigate which of the elements proposed in the questionnaire compose the framework of the cultural heritage of a place according to children’s perception. The replies are interesting and surprising at the same time. Students not only selected the categories of ‘language’ (76,2%), ‘arts’ and architecture of the buildings’ (45,2%), ‘manners and customs’ (66.7%), ‘traditions’ (59,5%), as expected since these concepts are familiar to students either through the school curriculum, their experiences, the education level of their families or from their broader stimuli; they also selected the heading ‘old industries’ (54,8%) as a component of the culture of a country. This is remarkable and possibly needs to be further explored as it shows that children perceive industrial buildings as a cultural component.

Then students were asked (Q3) whether they knew what ‘industrial heritage’ is in order to identify their conceptual familiarization with the term. The responses show that the vast majority of students (95.2%) know what ‘industrial heritage’ is while only 4.8% of them seemed not to understand the term giving a negative reply. The big percentage of the affirmative answers creates a grounded expectation and an auspicious prediction that the future generations will be more sensitive to issues related with industrial heritage, a field which reflects the cultural level of a nation.

Question 4 sought to explore the conceptual content of industrial heritage with regard to the students’ knowledge background and to this end, different components of industrial heritage were proposed to students to tick, with the possibility of more than one answer.

Here it should be underlined that when the components of industrial heritage were proposed analytically, according to the theoretical approaches of the concept, the percentages changed dramatically. The escalation of the responses was the following: ‘old industrial buildings’ were selected by 83.3% of the students, followed by the way of life and labour of the past (61.9%), the

production machinery (54.8%), the traditional wagons (52.4%), the traditional crafts (47.6%), the train engines (45.2%), the merchandise warehouses (38.1%), the traditional professions (35.7%) and the workers' old residences (23.8%). What is remarkable is that boys correlate to a greater degree industrial heritage with old industrial buildings (57.1%), machinery (78.3%), wagons (50%), train engines (52.6%) compared with girls. On the contrary, girls correlate to a greater degree industrial heritage with traditional crafts (55%), traditional professions (66.8%), the way of life and labour of the past (61.9%) compared with boys.

Questions 5a and 5b ("Do you know whether there are any industrial monuments in your city? If yes, can you name one which you have visited or heard of?") sought on the one hand, to detect whether industrial monuments are part of the students' aural and visual perceptions and on the other hand, to identify to what extent the specific monument students have visited or heard of has crucially contributed to the shaping of the historical and cultural identity of the local community for the younger generations. The students' replies to this two-fold question show that the overwhelming majority of the students (97.6%) knew the existence of and had visited one or more industrial monuments in their city. The Tsalapatas Rooftile and Brickworks Museum was the most well known (85.7%), followed by the Papastratos tobacco warehouse (7.1%), the steam train of Mt. Pelion (4.8%) and finally the Spierer tobacco warehouse.

The next question (Q6) aimed to identifying the range of visitation of the Tsalapatas industrial museum by students ("Have you ever visited the Tsalapatas Rooftile and Brickworks Museum? If yes, how was the visit made?"). It also sought to record the specific efforts made by the state, the families, the media and the museum itself through the organization of events and publicity material in order to valorize, promote and raise public awareness of the importance of the monument. These efforts aim to pass on to future generations the knowledge accumulated after having visited this museum.

36 out of 42 respondents (85.7%) replied that they had already visited the monument, indicating the comparatively greater popularity of the Tsalapatas Museum, which is due to the fact that the visit has been integrated into the cultural activities programme of the school (100%), thus assuring the students' full participation.

Next students were asked about the source of information about the existence of the Tsalapatas museum (Q7). The school initiative, through the teachers, which acted as the dominant motive of visitation (80.9%), was followed by parents (14.3%) and publicity brochures (4.8%) promoting and informing about the various events of the monument.

Question 8 sought to identify and comprehend the students' impressions and feelings from their visits to industrial monument sites. It also aimed to examine to what degree the students seek spontaneously to be in frequent contact with the museum, indicating their awareness of the crucial contribution of industrial heritage to the spectrum of culture of a place.

The vast majority of the students (83.3%) qualified the visit to the museum as 'very interesting', a small percentage (11.9%) replied it was 'good' whereas only one student (2.4%) found the visit 'boring' or 'indifferent'. Therefore it is concluded that almost all students (95.2%) were interested in the museum and expressed their willingness to visit it again. What is noteworthy is that students found the visit to the industrial museum much more interesting in comparison with visits to other sites prescribed in the school curricula, which is confirmed by the replies to Question 9 ("Would you visit the museum again?") where 95.2% of the students stated that it would visit again the museum.

The last three questions (Q10, Q11 and Q12) aimed to record the students' spontaneous reactions with regard to their contact with industrial heritage monuments through the play, the press, the role-play, in order to explore at a pilot stage the effectiveness of the pedagogic combination of knowledge and leisure. It is known that the play has been utilized in the framework of experiential education, the active involvement of students in real experience, provided for in the school curricula, which are particularly successful in Germany resulting in impressive results with regard to the knowledge gained by students about industrial heritage and its importance.



The students' answers to the above questions brought to surface the students' vivid desire to convert the simple museum guided tour to a multidimensional experience, according to successful European standards, as those in Germany. This is confirmed by the fact that 92.2% of the students expressed their willingness to write articles in the school newspaper, drawing data from their personal experience, in order to motivate their schoolmates to visit the museum (Q10). The fact that 7.1% of the students seems to be indifferent to this activity does not mean that it should not be adopted and used for learning and recreation purposes. Furthermore, what is impressive is the students' increased interest (88.1%) in participating in the production line (Q11), which allows the revival of the labour conditions of the era and how workers felt in this industry.

Finally, 83.3% of the students accepted positively the proposed museum guided tour in the future, which could have a two-fold goal: educational and at the same time pedagogical through the combination of knowledge with recreation. Students were asked whether they would like the guided tour in the museum to take the form of a theatre performance, the tour guides being actors who impersonate the factory workers and explain the production process to visitors (Q12).

#### 4. CONCLUSION

A brief presentation of the components of the research allows us to define a field of reflection and observations with regard to the expansion and enrichment of the practices which have to be adopted so that the industrial heritage treasures in Magnesia are conserved and pushed forward through their tourist valorisation and at the same time serve as history and culture transmitters. A first remark is that all three industrial monuments present an analogy as for the opportunities and this is because they are in close vicinity with the attractive natural beauty of mountain Pelion. In addition to this, they are scattered in the Prefecture of Magnesia, in Central Greece at almost equal distances from the big urban centres of the country (i.e. Athens and Thessalonica). Moreover, they seek for financing through European funds and programmes. They also face the same threats. More specifically, since the local government owns them they are not supported by broad actions that could convert them into strong tourist assets combining attractiveness and quality.

The educational programmes which are implemented for the promotion of the industrial monuments of the prefecture contribute to the recognition and conservation of the industrial heritage of the region. These programmes have to be more accessible and attractive to the students' interests by enriching their content with audiovisual material concerning the labour conditions and the way of living of the working class, which participated in the production procedure of the specific monument. The creation of this audiovisual material can be a live testimony and a typical means of revival of the past so that the acquisition of the historical knowledge and the elements of cultural identity keep students' interest alive and in alert with regard to the significance of the industrial heritage as a crucial factor contributing to the shaping of the history of their homeland. It is obvious that this material should also be accessible to adults, foreign and local tourists, who would also benefit from learning about the contribution of the given industrial monument to the shaping of the history and culture of the Prefecture of Magnesia. The opportunity for experiential learning through role-play in the context of an organized game could trigger and activate the students' interest in the significance of the industrial heritage. The students' responses show this willingness on their part as the prospect of such an initiative absolutely corresponds with the children's inner need to play and activates in a pedagogical way their creative imagination which serves as a channel for the knowledge about the past to be instilled and allows its live revival.

Overall the attractiveness of all the industrial monuments of the Prefecture of Magnesia can be enhanced through various exhibitions, local events, national and international scientific or cultural conferences and anniversary celebrations for the establishment of the monuments. Furthermore, it is important that the events, which can be held in the different industrial monuments, be broadened and enriched. In particular, in the steam train of Pelion we suggest that photograph and printed material exhibitions on the history of the railways be organized so that the monument attracts more visitors. We also suggest that the simple transport of visitors from Volos to Milies and vice versa be enriched with meals and music programmes provided during the trip. This way even the most demanding

visitors will have the opportunity to access this industrial monument and enjoy themselves at the same time.

In conclusion, industrial heritage tourism, a mild form of tourism, can complement and differentiate the tourist product provided in the Prefecture of Magnesia and extend the tourist season at the same time. In addition, industrial heritage tourism can contribute – to a limited extent- to the regional development and the economic regeneration of remote and neglected areas by putting forward their comparative advantages as well as to social and environmental prosperity. The young generation, children and adolescents, are the clients of tomorrow, the future tourists, consumers and promoters of cultural, and consequently, industrial heritage. The impact of their preferences on their parents' decision-making is tremendous so we should try to pave the way to raise awareness among the youth and present cultural heritage in an attractive and interactive which is meaningful to them.

#### FOOTNOTES

[1] The data were collected on 2 April 2008 after a visit to the museum by Mrs. Maria Papachristopoulou and an interview she had with the person in charge of the museum, Mr. Stavros Tragakis.

[2] This programme is implemented by PBGCF in collaboration with the Makrinitza Centre for Environmental Education in the framework of the National Network for Environmental Education: “Industrial heritage: Values from the past trust for the future”.

[3] The interview took place on 15<sup>th</sup> May 2008 in the Railway Station of Volos. The interviewee was Mr. Georgios Apostoleris, station-master and member of the friends of the Mt. Pelion train.

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