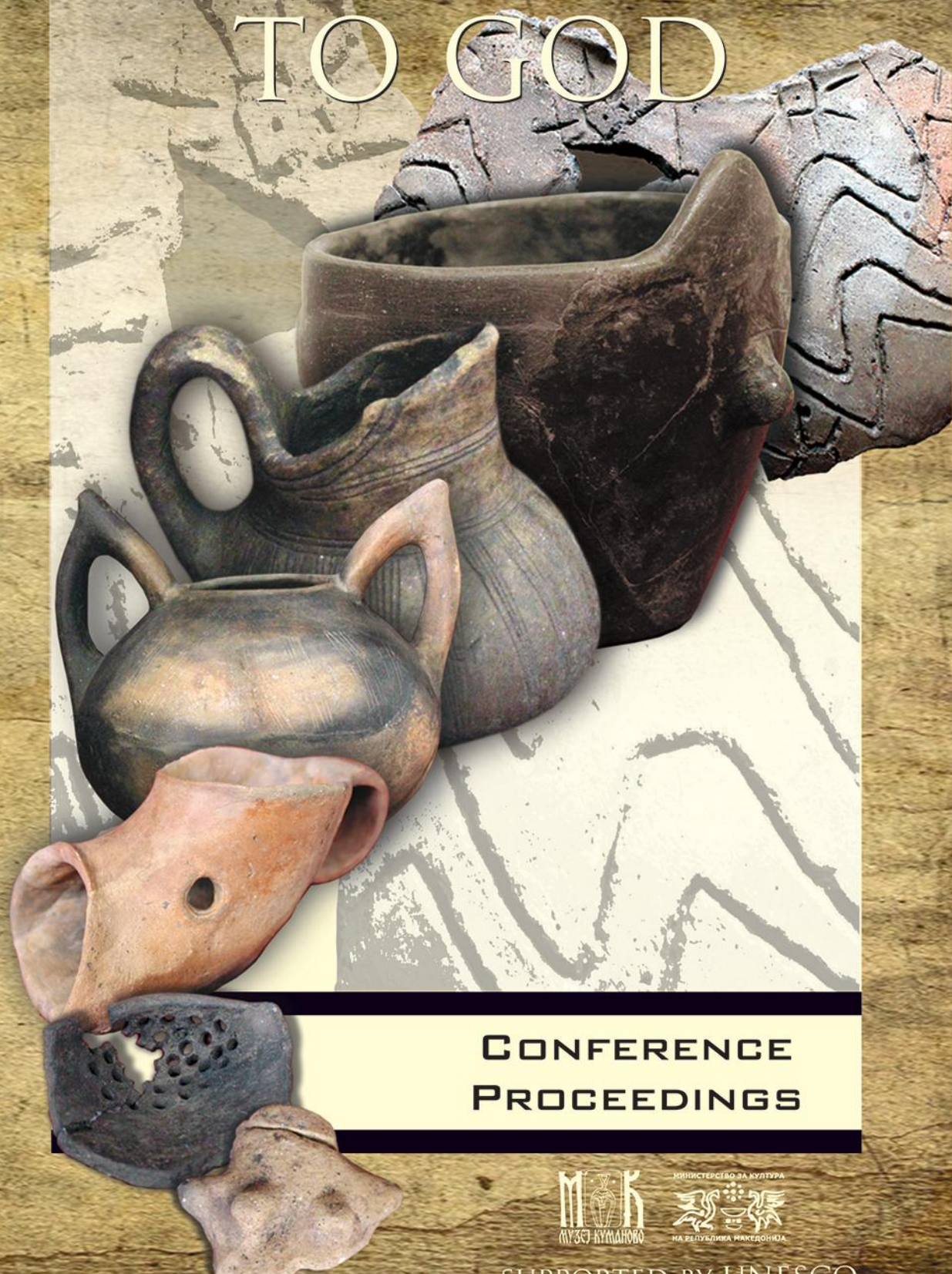


EVIDENCES OF VOTIVE OFFERINGS  
IN THE SANCTUARIES,  
TEMPLES AND CHURCHES

# GIVING GIFTS TO GOD



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# **GIVING GIFTS TO GOD:**

**EVIDENCES OF VOTIVE OFFERINGS IN THE  
SANCTUARIES, TEMPLES AND CHURCHES**

*Proceedings of the 1st & 2nd International Archaeological Conference  
“KOKINO”, held in Skopje & Kumanovo, 2016-2017*



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# PERSPECTIVES FOR DEVELOPMENT OF CULTURAL TOURISM IN KOKINO

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**Abstract:** In the period of past few decades tourism has seen constant growth globally and in the competitive tourism market cultural attractions enrich the offer of tourist destinations. Research from relevant literature related to tourism show, that tourists when traveling to destinations tend to visit cultural and historical sites, museums, events and festivals, and that was always been regarded as an integral part of the tourist experience. These activities are the basis of cultural tourism and in our case the connection between ancient astronomy and tourism is investigated. The purpose of this paper is to present the potentials of the site Kokino as an attraction and generator of tourists visit. The paper examines the existing literature related to cultural tourism development in the field of ancient observatories and their management for tourism purposes. Secondary data from relevant sources were used to make a model of tourism development. At the end of the paper, recommendations are given on the directions in which the Kokino site should move in the possibility of attracting foreign and domestic tourists.

**Key words:** Kokino, cultural tourism, astronomy, development

## Introduction

Today tourism is one unique phenomenon present in all countries around the world and has constant tendency of increasing its growth on a international level. There is no country in the world that does not develop some type of tourism or a country where citizens are not involved in tourist movement outside of their permanent place of residence for various reasons such as culture, business, pleasure, sports and recreation, religion or other reasons. According to the United Nations World Tourism Organization<sup>1</sup>, international tourists arrival in 2016 has reached 1.235 million. Tourists expenditure reached to 1.220 billion US dollars, and the tourism industry participated with 10% of the global GPD (gross domestic product). Every eleventh employed person in the world is employed within the tourism industry. Tourism will maintain its continuous and positive level of development from the past 60 years in the coming years. With studies predicting continued growth, tourism is an increasingly important factor for tourism policy and governments and also in the planning and management at UNESCO World Heritage sites<sup>2</sup>. There are many ways of defining tourism, but a commonly

accepted definition is the one developed by the United Nations World Tourism Organization (UNWTO): The activities of persons travelling to and staying in places outside their usual environment for not more than one consecutive year for leisure, business, and other purposes. Tourism is the temporary, short-term movement of people to destinations outside the places they live and work and their activities during the stay at destinations.

Cultural tourism is one of the oldest forms of special interest tourism, and yet, remains one of the more misunderstood types<sup>3</sup>. People have been travelling for what we now call cultural tourism reasons since the days of the ancient Romans visiting Greece and Egypt or Chinese scholars making journeys to beautiful landscapes. Given the many definitions of culture, it's hardly surprising there are many definitions for cultural tourism<sup>4</sup>. Cultural tourism occurs when participation in a cultural or heritage activity is a significant factor for traveling. Cultural tourism includes performing arts (theatre, dance, music), visual arts and crafts, festivals, museums and cultural centers, and historic sites and interpretive centers. The movement of persons to cultural attractions in

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<sup>1</sup> UNWTO (2017) UNWTO Tourism Highlights, 2017 Edition. Madrid: UNWTO

<sup>2</sup> Pedersen, 2002

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<sup>3</sup> Du Cros; McKercher, 2015

<sup>4</sup> Whyte; Hood; White, eds., 2012



cities or countries other than their normal place of residence, with the intention to gather new information and experiences to satisfy their cultural needs is cultural tourism. In a broad sense, cultural tourism covers all movements of persons to specific cultural attractions, such as heritage sites, artistic and cultural manifestations, arts and drama to destinations outside their normal place or country of residence. There are many types of cultural tourism, like archeological tourism, astrotourism, educational tourism, heritage tourism, music tourism, manifestation tourism, religious tourism and other types connected with culture and travel of tourists.

### Connection between astronomy and tourism

Basically, astronomy is the study of stars, planets and space. Historically, astronomy has focused on observations of heavenly bodies. Ancient cultures were using astronomy to plan and structure their lives, to determine and understand time for the purpose of their concerns<sup>5</sup>. Astronomy is multidisciplinary science and uses different methods and aspects in research and study. Archaeoastronomy for example is the study of beliefs and practices concerning the sky in the past<sup>6</sup>. Archaeoastronomy or cultural astronomy as science tend to seek answers to questions as<sup>7</sup>: What did ancient people see in the sky that mattered to them? How did they interpret what they saw? Precisely what knowledge did they acquire from looking at the sky, and to what ends did they employ this knowledge? The role the sky played in the lives of ancient cultures is also important issue for the cultural tourism and specific type of tourism - astrotourism. One of the good and valuable aspects of astrotourism is that sky never needs to fix and develop, it is always available and has its unique features<sup>8</sup>. The more the people become educated, the more they enjoy the beauties of the sky. So, astrotourism whether in night or in day can be considered to be sustainable form of tourism.

Astrotourism goes back many centuries when mankind looked up to the stars, imagined figures and gave them meanings. Monuments were erected and sites given a special connotation due to the affinity humans made with the universe. Nowadays, it has become a rising niche of tourism with much potential, mainly educational, social and to relax, thus being considered a leisure activity<sup>9</sup>. The concept of astrotourism has expanded over the years, from dictionary

definitions of “activities by tourists paying to travel into space for recreation” to “tourism using the natural resource of unpolluted night skies for astronomical, cultural, or environmental activities”<sup>10</sup>. Astrotourism opens new opportunities of bridging science and tourism, motivating alliances for starry nights, science, culture, and nature. Associating nightscapes with heritage is a logical step in astrotourism. The night sky has played a key role in the development of civilization, including orientation and navigation, agriculture, calendars, cultural travel, and celebrations. The dawn of many cultures is marked by archaeoastronomical milestones, witnessed at widespread sites, including Stonehenge, Chichen Itzá, Giza, Mesa Verde, Chankillo, Persepolis, Almendres, Gochang, or Chaco Canyon. The relevance of these sites, the commemoration of key dates in ancient calendars, and other intangible and oral manifestations are a resource for cultural-scientific event tourism. Astrotourism entails observatories, stargazing places and dates, heritage sites related to astronomy, and natural dark sky areas of outstanding beauty. Astronomical tourism is the form of tourism that involves the sites with astronomical interest, historical and archaeological sites, modern research organizations (observatories, astronomical institutes), educational centres, space museums, planetariums, etc<sup>11</sup>.

Balkan countries cannot compete with developed countries with respect to astrotourism. Some authors suggest that organizers of the travel from this countries should introduce naked-eye astronomy into their tourism programs – observations of the night sky without a telescope<sup>12</sup>.

### Methodological framework of the research

The aim of this paper is perspectives for development of cultural tourism in Kokino. For the purpose of the research a review of ancient observatories in selected countries was undertaken. In the interest of the paper, we use secondary data sources by consulting relevant literature on the subject of astrotourism and the Internet. A literature review shows that there is existing body of literature concerning astrotourism and archeology sites management concerning tourism visitors. Using Internet sources we also collected data such as tourism strategies and tourism law that have been analyzed later. The main method used in this comparative research is content analysis<sup>13</sup>. Content analysis is an observational research method that is used to systematically evaluate the actual content

<sup>5</sup> Burton, ed., 2016.

<sup>6</sup> Ruggles; Urton, eds., 2007.

<sup>7</sup> Kelley; Milone, 2011

<sup>8</sup> Najafabadi, 2012

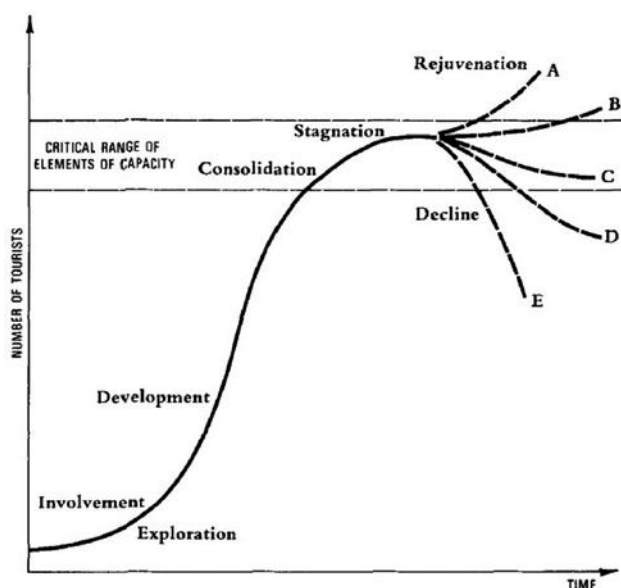
<sup>9</sup> Matos, 2017.

<sup>10</sup> Jafari; Xiao, eds., 2016.

<sup>11</sup> Mickaelian, 2016

<sup>12</sup> Tadić, 2016, 127-144

<sup>13</sup> Ritchie; Burns,; Palmer, eds., 2005.

**Fig. 1** – Hypothetical evolution of a tourist area

**Source:** Butler, R. (1980) The concept of a tourist area cycle of evolution: Implications for management of resources. *The Canadian geographer*, 24 (1), pp. 5-12

of the official web pages of ancient observatories in four countries: Kokino in Macedonia, Carahunge in Armenia, Carnac in France and Stonehenge in England. On the basis of the findings we use comparative analysis to highlight similarities and differences among multiple features of ancient observatories connected to tourism. The comparisons helps us to establish the relationships of multiple case designs as a research strategy.

We elaborate on relationship between tourism and development through evaluation of some models outlined in relevant tourism literature. The model of space-temporal development of tourism proposed by Opperman<sup>14</sup>, although it was developed at national level, represents a useful tool in illustrating tourism potential success in development. This model supports the economy of developing countries and it is composed of two separate sectors (formal and informal tourism sectors) that although co-exist side by side, they have very few links. The model of Miossec<sup>15</sup> describes the structural evolution in time and space of tourist regions. The model identifies five distinct phases regarding the changes that occur in the provision of facilities (the resorts and of transport system) and in the behavior and attitude of tourists, of local decision-factors and the host population. Butler develops a more complex model than the one of Miossec on the hypothetical evolution of tourist areas.

Butler developed a model which shows how tourist areas may grow. Tourist area may start off from being a small and low key, destination. He suggests that all tourist areas go through the same sort of process. (**Fig. 1**)

The seven stages of tourist development are presented below:

1. The stage of Exploration - a small number of tourists visit the area. The area is unspoilt and few tourist facilities exist.

2. Stage of Involvement - local people start to provide some facilities for tourists. There starts to become a recognised tourist season.

3. Stage of Development - the host country starts to develop and advertise the area. The area becomes recognised as a tourist destination.

4. Stage of Consolidation - the area continues to attract tourists. The growth in tourist numbers may not be as fast as before. Some tensions develop between the host and the tourists.

5. The stage of Stagnation - the facilities for the tourists may decline as they become old and run down. The numbers of tourists may decline too.

6. The stage of Rejuvenation - investment and modernisation may occur which leads to improvements and visitor numbers may increase again.

7. The stage of Decline - if the resort is not rejuvenated (stage 6) then it will go into decline. People lose their jobs related to tourism. The image of the area suffers.

The Butler model is a generalisation, and so not all tourist areas will follow this process. If we adjust Butler's model to the four ancient observatories that are point of interest of this research, according to the given parameters we can conclude, that observatories Kokino and Carahunge are in the first stage of tourism development or the exploration stage. The entrance in these two sites is free of charge. On the other hand, observatories Carnac and Stonehenge are in the sixth stage of tourism development or the rejuvenation stage. The entrance in Carnac is 11 euros and entrance in Stonehenge is 18 euros. Stonehenge has registered more than 1.38 million visitors in 2016<sup>16</sup>.

### Review of selected ancient observatories in the context of tourism development

Observatories were built in an effort to track the sun, moon, planets and stars, giving ancient cultures a calendar to know when to plant, when to harvest, when certain ceremonies should occur and more. This observatories allowed ancient cultures to flourish. Such privileged information allowing the

<sup>14</sup> Oppermann, 1993, 535–556.

<sup>15</sup> Miossec, 1977, 41-48

<sup>16</sup> <https://www.statista.com/statistics/586843/stonehenge-visitor-numbers-united-kingdom-uk/> [Accessed 10.10.2017]

ancient people to predict the seasonal shifts must have seemed to come from divine inspiration. As they began to record their observations, some cultures developed quite an accurate body of astronomical knowledge. Many cultures built markers to align with sites on the horizon to mark the summer and winter solstices, then began to build permanent observatories with openings to catch the first light precisely on those mornings<sup>17</sup>.

Concerning archaeoastronomy, there are three main aspects of the astronomical system associated with a given place and thus contributing to the value of a site<sup>18</sup>:

- material evidence of the astronomical place in the form of fixed property and/or moveable objects;

- the results of scientific activities (in the broadest sense), including but not restricted to astronomical observations; and

- Socio-cultural applications and uses of astronomy at a given moment or over a given period for the site.

For the purpose of the paper, we analyze four archaeoastronomy sites as follows: Kokino in Macedonia, Carahunge in Armenia, Carnac in France and Stonehenge in England. The locations of this sites is shown in figure 2. (**Fig. 2**)

### Kokino

The megalithic observatory Kokino is located in the municipality of Staro Nagorichane, 75 kilometers from Skopje and about 30 kilometers from Kumanovo. It is situated right beneath the mountain peak Tatihev Kamen on 1013 meters above sea level and the name takes after the same called village. The archaeological site was accidentally discovered in the autumn of 2001<sup>19</sup>. Among the many findings in this locality numerous artefacts were discovered (ceramic plates, amorphous dishes, stone axes, etc.)<sup>20</sup>. The site contains several artificially carved and flattened surfaces (platforms) and objects cut in the rocks, such as stone seats, astronomical and ritual markers, paths, etc. The most fascinating part of the locality is the lower, western platform which contains monumental stone seats or “thrones” carved in the rock terrain.

<sup>17</sup> NASA Sun-Earth Connection Education Forum (2005) Ancient observatories – Timeless knowledge. NASA Sun-Earth Connection Education Forum.

<sup>18</sup> Ruggles; Cotte, eds., 2010.

<sup>19</sup> Gjorgjievski, 2017.

<sup>20</sup> Taskov; Dimitrov; Metodijeski, 2017.

**Fig. 2** – Map of selected ancient observatories



**Source:** Author's own illustration

The existence of a marker for the equinoxes indicates the sophisticated observational skills of the Kokino “astronomers”<sup>21</sup>.

### Carahunge

Carahunge is a megalithic monument in southern Armenia close to the city of Sisian, at about 1,770 m above sea level has often been acclaimed as the oldest observatory<sup>22</sup>. The monument, composed of dozens of standing stones, has some perforated stones. The direction of the holes has been measured and their orientation is related to the sun, moon, and stars, obtaining a date for the construction of such devices. The Carahunge monument closes off a slightly elevated area at the confluence of two ravines. This is occupied by several underground square structures that have been interpreted as tombs. The megalithic assemblage, to the east of this large necropolis, is composed of various structures of basaltic standing stones. In the nearby city of Sisian, there is a small museum dedicated to findings in the area, including palaeolithic petroglyphs found on mountain tops in the area, and grave artefacts form the Bronze Age burial site with over 200 shaft graves.





### Carnac

The Carnac stones are an exceptionally dense collection of megalithic sites around the village of Carnac in the northwest of France, consisting of alignments, dolmens, tumuli and single menhirs. More than 3,000 prehistoric standing stones were hewn from local rock and erected by the pre-Celtic people of Brittany, and form the largest such collection in the world. Most of the stones are within the Breton village of Carnac, but some to the east are

<sup>21</sup> Kuzmanovska; Stankovski, 2015

<sup>22</sup> Ruggles, 2015.

**Tab. 1** - Comparative analysis of web pages of selected ancient observatories

Ancient observatory, country	Web page main interface	Web page (content)
Kokino, Macedonia		<b>kokino.mk</b> (home, map of Kokino, events, history, museum, publications, visit Kokino, tourism and hospitality offer, android application on Google Play, gallery – photos by category, donors, language – two options)
Carahunge, Armenia		<b>carahunge.com</b> (home, gallery, information, map, contact)
Carnac, France		<b>carnactourism.co.uk</b> (discover Carnac, gallery, events, weather forecast, map, were to eat, were to sleep, to see, to do, going out, prepare your stay, useful to know, Carnac tourist office, web cams, videos, contact, public and municipal services, language – tree options)
Stonehenge, England		<b>www.english-heritage.org.uk/visit/places/stonehenge/</b> (plan your visit, prices and opening times, events, map, history, schools, families, things to see and do, exhibition, trip advisor and social media, guide book, nearby places, similar places, gallery, about us, support, language – eleven options)

**Source:** Official web pages of selected institutions

within La Trinité-sur-Mer. The stones were erected at some stage during the Neolithic period, probably around 3300 BCE, but some may date to as early as 4500 BCE. The site was used for lunar observation and there was two large megalithic lunar observatories in the Carnac area<sup>23</sup>.

### Stonehenge

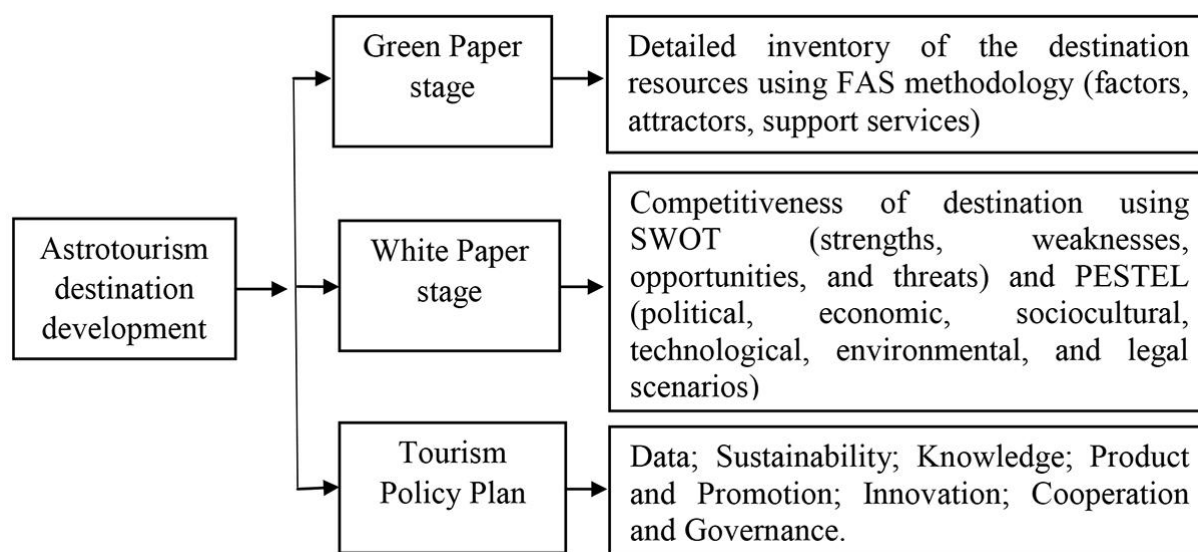
Stonehenge is one of the most famous prehistoric monuments in the world. The first known writings about Stonehenge appeared in the XII century in histories of Britain<sup>24</sup>. Stonehenge is located tree kilometers west of Amesbury in Wiltshire, England. It consists of a ring of standing stones, with each stand-

ing stone around four meters high, and two meters wide and weighing around 25 tons. The stones are set within earthworks in the middle of the most dense complex of Neolithic and Bronze Age monuments in England, including several hundred burial mounds. (Tab. 1)

The analysis of the official web pages of the four ancient observatories showed that observatories with higher number of tourists have rich web pages and colorful offers for visitors. Namely, the smallest content, information, offer and activities is noticed in the web page of Carahunge, then follow by the web page of Kokino where it is possible to find more information about the destination and activities that potential visitors can practice and be involved during the visit and stay at the destination. The most “user friendly” are the web pages of Carnac and Stonehenge, with

<sup>23</sup> Thom; Thom; Gorrie, 1976, 11-26

<sup>24</sup> Malone; Bernard, 2002

**Fig. 3** – Astrotourism destination development and position on the market

**Source:** Author's own illustration, adopted from Fayos-Solá, E., Marín, C., Jafari, J. (2014) Astrotourism: No Requiem for Meaningful Travel. *Revista de Turismo y Patrimonio Cultural*, 12 (4), pp. 663-671

rich content and necessary information for tourists, and these web pages have been translated into more foreign languages. Social media is also present in the web pages. Carnac's web page is linked to the tourist office of the destination, which is a good example of tourist promotion of the site.

### Conclusion

Across the world there are a number of ancient observatories that enrich the offer of cultural tourism by practicing one of its forms – astrotourism. In the paper we gave examples of four ancient observatories and through the analysis of their web pages we have seen the degree of development of these destinations that attract visitors for the purpose of astrotourism. Beside the offered models for development of tourism in the destinations, in conclusion we also give a proposal model for the development of cultural tourism in Kokino. The model for astrotourism destination development and position on the market is based on research that we find in the relevant scientific literature on this topic. Astrotourism diverges from conventional forms of tourism both from the demand and supply perspectives, and for different stakeholders has different meanings and opportunities:<sup>25</sup>

For tourists, it entails a knowledge-rich experience, combining the pleasures of unspoiled sites, enlightened company, and personal tangible experiences with learning, knowing, and understanding the observable surroundings at large.

For the host communities, it signifies a positive

reputation, often beyond local reaches, additional edutainment and scientific facilities, motivation and implication of many stakeholders, optimizing appeal chances in very competitive tourism markets.

For astronomy and the general scientific community, it brings a unique chance to come near ample publics, and to gain support regarding science objectives, values, and financial needs. It also supposes an excellent opportunity to make these publics aware of the scientific viewpoints regarding strategic issues, such as human capital formation, good governance, and environmental conservation.

The three stage model for astrotourism destination development is shown in fig. 3 below. (**Fig. 3**)

The model for astrotourism destination development is divided in three stages as follows: Green Paper stage, White Paper stage and Tourism Policy Plan. The most important starting requirement for an astrotourism quest is applying know how to an inventory and analysis of the resources available or Green Paper stage<sup>26</sup>. When the analysis is done, conservation of these resources becomes a main issue, which must be tackled through the establishment of voluntary or compulsory standards and norms, followed by adequate programmes and actions. Adequate governance proposals and decisions from the outset are also important. It is erroneously believed that tourism governance setups must always be organized and conducted by government, but this is not the case. Neither is the fundamentalist free market doctrine that a left alone private sector will do. As-

<sup>25</sup> Fayos-Solá, Marín, Jafari, 2014, 663-671

<sup>26</sup> Fayos-Solá, Marín, Jafari, 2014. 663-671



tro tourism resources are usually a clear cut case of a common pool resource, and it is tailor made governance solutions which can be the most effective and efficient to optimize resource use. Finally, adoption of a Tourism Policy Plan, with specific provisions for astrotourism is highly recommended. This plan will usually include programmes and actions for data production and mining; sustainability provisions; knowledge creation, dissemination, and application; supervision of quality and excellence of operations; product formulation, promotion, and follow up, and explicit arrangements for institutional cooperation and governance.

In this paper, different models for destination development were presented. Basically, we pointed out the model for astrotourism destination development resulting from the potential of Kokino for the development of this type of cultural tourism. What kind of development model will be applied in the case of Kokino remains to be decided by all stakeholders through organizing meetings and undertaking concrete measures in the future. One thing is certain, Kokino as a destination with natural and cultural potentials deserves more attention by authorities in the quest of attracting foreign and domestic tourists with activities that will enrich tourist offer at regional, national and international level.

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