Adaptation of circular models for global heritage cities

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6 BRIDGETOWN, BARBADOS: A LIVING WORLD HERITAGE CITY IN THE WEST INDIES
Author(s): de Waal, Maaike (Faculty of Archaeology, Leiden University)
Presentation Format: Oral
In 2011, Historic Bridgetown and its Garrison, was recognized as a UNESCO World Heritage Site. The historic centre of the Barbados’ capital city, together with its nearby military garrison, is a unique example of British colonial architecture. The historic city is characterized by a distinctive 17th-century serpentine street lay-out and includes a large number of historic monuments dating from the 17th, 18th and 19th centuries.
At the same time, Bridgetown is a vibrant city and home to no less than 110,000 people. In addition, Barbados welcomes another 38460 tourist visitors each month on average, most of whom also visit Bridgetown to enjoy the city life and to benefit from the many tax free purchase opportunities. Adding this to the fact that the city is also the government and business centre of the island, it makes one curious to find out how well the dynamics of a vibrant city life go together with a seemingly more static heritage situation in this particular example. In addition, Barbados is a small island developing state (SIDS), which has implications for the possibilities for management and protection of the island’s cultural heritage.
This paper will focus on how different stakeholders are using and experiencing Bridgetown’s World Heritage Site, and some challenges and success stories relating to heritage preservation will be highlighted.

7 AN ASIAN EXPERIENCE OF GENTRIFICATION IN WORLD HERITAGE CITIES: OLD TOWN OF GALLE AND ITS FORTIFICATIONS, SRI LANKA
Author(s): Jinadasa, Uditha (Leiden University)
Presentation Format: Oral
The Old Town of Galle and its Fortifications gained heritage recognition in 1988 due to its Dutch colonial architecture (under the criterion iv). Since inscription, it has experienced increasing gentrification as a result of a booming tourism industry combined with stringent local heritage policies, which prioritize the preservation of Dutch colonial architectural heritage over the local community. This paper surveys the gentrification levels of the city with qualitative and quantitative analysis methods. It also analyzes the reasons behind these processes, focusing on local and international heritage policies. It argues that the exponential increase in land value of the fort, a direct result of heritage recognition, has turned the ordinary colonial town house into a commodity that caters to tourists in various ways. Today, the majority of town houses are either owned or leased by local and foreign investment companies and businessmen, causing a population drop by one third. While one fifth of private properties are currently owned or leased by foreign investors, by contrast, residential buildings in the city have dropped by half. Conflicting interests persist between the heritage authorities and the community over developing properties. While the conservation goals of the heritage authorities in preserving colonial built heritage is partially fulfilled, the whole process has displaced the local residents.

8 ANCIENT TARRACO, MODERN TARRAGONA: AN OUTSIDER’S PERSPECTIVE OF A WORLD HERITAGE SITE AND ITS PROBLEMS
Author(s): Forrestal, Colin (Universitat Rovira i Virgili; IPHES)
Presentation Format: Oral
This paper concerns the oldest roman settlement on the Iberian Peninsula which became the Roman city of Tarraco. Established during the second Punic war, Tarraco was the capital of the Roman province of Hispania Citerior and later of Hispania Tarraconensis but is known nowadays by the name Tarragona, which is the capital of the southern region of Catalunya, Tarragona in Spain. In 2000 Tarraco was made a World Heritage site by UNESCO.
Like a lot of modern cities that have developed around an older city, a large amount of the Roman archaeology has been utilised to build later buildings and walls. While there has been a lot of damage due to various regional disputes which saw Tarragona coming repeatedly worse off to its northern sister city of Barcelona, there is a tremendous amount of impressive Roman archaeology still accessible of which the city is rightly proud of.
But Tarragona is a living vibrant city, and it is not only its Roman heritage that needs to be preserved but its rich medieval, Napoleonic, and republican heritage that also needs to be celebrated and acknowledged.
This paper takes an outsider’s view of this wonderful city and examines the problems the Country, Region and City have in preserving and developing all aspects of this precious heritage for future generations to come. It will look at not only the funding aspects but the logistics, the legal requirements and the social inclusion of keeping this city a hidden jewel on the Mediterranean coast.

9 ADAPTATION OF CIRCULAR MODELS FOR GLOBAL HERITAGE CITIES: REGENERATION OF ISTANBUL WORLD HERITAGE SITE AS A CASE STUDY
Author(s): Ikiz Kaya, Deniz (Eindhoven University of Technology; Ozyegin University)
Presentation Format: Oral
In this rapidly globalising world, managing change in historic cities while promoting their sustainable development has been a daunting task. It is further complicated for global heritage cities, defining historic urban landscapes (HUL) designated as World
Heritage Sites within global cities, by a number of issues: engagement with global actors in addition to a broad range of stakeholders; increasing complexity of legislative, administrative and operational systems; and the imperative to engage local communities meaningfully in sustainable development and management processes. Acknowledged as leverage for more inclusive, safe and resilient cities, cultural heritage and HUL conservation play a crucial role here as drivers of sustainable development. UNESCO’s HUL Recommendation has presented interdisciplinary tools to cope with these challenges, and new management models have been developed to further operationalise these principles.

The circular economy model has been proposed to understand the complex relationships between wide range of values and stakeholders, to valorise these resources in synergistic means, and to illustrate the symbiosis between conservation and development. This approach however requires new evaluation and management tools to be developed and tested. In this research, hence, a regeneration project implemented in the Istanbul WHS will be examined as a case study to provide empirical evidence of the economic, social and cultural benefits of this synergy within globalised urban context. Initially, cultural, natural and human resources of the site, and its impact on the values will be investigated. Then, social network analysis and cognitive mapping techniques will be employed to map out the complexity of decision making, followed by the analysis of their unique management tools and strategies. This assessment will complement the examination of existing operative tools and will test some of the key indicators introduced by the circular economy model through the employment of an innovative mixed methodology and a novel case study.

10

100 YEARS OF REMOTE SENSING AND URBAN SPRAWL: MULTI-TEMPORAL, MULTI-SENSOR MAPPING OF A HISTORIC CITY

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Presentation Format: Oral

Archaeological remains embody vital information about how humans have adapted to macro-scale economic and environmental change in the past, and can inform how we in the present can adapt to these changes. However, these very processes of change directly threaten these remains. To mitigate the impact of implacable economical development on the historic environment we need to urgently map and characterize as much of it as possible. Doing this is only feasible using remote sensing methods to cover large areas. However, making sense of the fragmentary remains in the present can be challenging, as often much has been lost already, and interpreting fragments without their wider context is difficult. This can, however, be addressed by tapping the vast archives of remote sensing imagery available, including aerial photography, Cold War surveillance imagery and satellite data. These enable us to both contextualize what remains and to quantify what has been lost.

Here we will explore the application of state of the art remote sensing techniques for the mapping of cultural heritage threatened by urban encroachment during the last century. We demonstrate this using the ancient city of Jerash, Jordan, as a case study, using aerial photography dating back to 1917 in conjunction with modern airborne laser scanning. The archaeological site is representative for modern cities as the 20th and 21st centuries rapid demographic expansion and population movement caused by geopolitical instability in the region has led to much of the ancient city and its environs being obliterated by modern development.

This paper present the recent work of Stott et al. (doi.org/10.1073/pnas.1721509115) and serves to highlight these issues and argues that, by adopting these approaches and making the resulting mappings available to researchers and decision makers as open data, a more sustainable future for such irreplaceable cultural heritage information can be assured.

11

ISSUES ASSESSING THE IMPACT BUILDING MAJOR INFRASTRUCTURE FACILITIES IN RUSSIA HAS ON THE NATION’S ARCHAEOLOGICAL HERITAGE

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Presentation Format: Oral

Constructing major Russian infrastructure projects has expanded over the last 10-15 years. Projects include major highways (particularly east-west), construction of gas and oil pipelines, and numerous hydroelectric power stations.

It’s certain that archaeological heritage also suffers during works on this scale. Contemporary Russia follows guidelines for new road schemes, bypassing major population centres. Builders choose routes with minimum cadastral costs, through land which is poor for either farming or capital building projects. These watershed lands have low numbers of archaeological heritage sites. Road-building now impacts archaeological sites far less than two decades ago. Road-building policy keeps costs low, and helps to preserve archaeological sites. One example is the Moscow-Kazan Highway, where the IA RAN has been involved for the past three years.

Russian archaeological sites are imperilled when near to hydroelectric installations - risking flooding of ancient long-inhabited areas.

In recent years, the IA RAS surveyed before construction of hydro-electric installations in the middle reaches of European Russia’s largest river, the Volga – at the Cheboksary Hydroelectric Station.