Interpretation Planning and its Role in Sustainable Tourism and Visitor Management at Geoheritage Sites

Graham C Barrow
Manchester Metropolitan University. UK

Introduction

This paper is concerned with how and why we should plan our communication with visitors about our heritage, and how this can help the sustainable development and management of Geoparks.

Communication with the public about natural, cultural and historical heritage can take place in a number of ways. This paper is concerned particularly with the role that site interpretation can play in the development of tourism and the management of heritage resources, with particular reference to Geoparks.

This paper is a companion to a paper by my colleague David Revell, How to get excited about rocks: Designing environmental interpretation that inspires and motivates visitors and enhances the visitor experience, published elsewhere in this journal and also presented at the 3rd International Forum on Geoheritage.

Sustainable tourism

Geoparks have an important potential leadership role to play in demonstrating sustainable tourism development. Some basic principles of sustainable tourism are worthy of note, such as those developed by a group of United Kingdom government agencies as long ago as 1991 (ETB, 1991). These are:

(a) The conservation and protection of landscapes and wildlife needs the support and understanding of the public, private and voluntary sectors.

(b) The enjoyment of visitors can be enhanced if the activities and interests promoted by tourism build on the local character of the area – its sense of place.

(c) The economy of many rural areas is often very dependent on the expenditure of visitors, and as far as possible local communities and people should be able to benefit from this.

(d) The development of facilities and services to enable tourists to enjoy rural areas and special places are required, but their scale and location in relation to the surrounding landscape must be carefully planned.

(e) The design of new facilities for visitors should be in keeping with the landscape and seek to enhance it wherever possible.

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Author: Graham C Barrow BA (Hons) MSc MPhil, Formerly Director of the United Kingdom Centre for Environmental Interpretation at Manchester Metropolitan University. graham@imagemakers.uk.com

www.igu-cog.org
Interpretation

Interpretation is a term used to describe the communication process that takes place with people visiting sites of natural or cultural heritage interest, including geoparks. It can be defined as follows:

"Interpretation is the art of explaining the meaning and significance of sites visited by the public."

The factors that distinguish interpretation from other forms of communication, such as marketing, visitor information and formal education, are:

(a) The audience are on a leisure visit, so the approach taken must be informal, entertaining and not hard work for them.

(b) A particular site or object is being seen, such as a geopark or geological feature, so that the aim is to help the public enjoy and understand it at first hand.

(c) The organisation or individual interpreting the site aims to generate a concern for its conservation, and / or to encourage an understanding of the processes and activities taking place there.

Interpretation must also be distinguished from visitor information, which is purely factual, and tends to focus on telling where to go and what to see, rather than the stories and significance of the site or feature. Interpretation aims to reveal the meaning and relationships about places, features and events in a way that appeals to people and triggers their further interest (Cable and Beck, 2011).

Interpretation can also be seen as a tourism service or product, and commonly includes media and visitor experiences such as visitor centres, exhibitions, publications, trails, museum displays, websites and guided tours.

Historical roots

For those unfamiliar with environmental and heritage interpretation, it is useful to trace its roots to four major influences.

(a) Guiding and the Growth of Tourism

Ever since the embryonic tourism industry of the 18th Century began to encourage visits to new places and cultures, there has been the need for a welcome, a knowledgeable local person to show the visitor around, and sometimes the need to look after their safety in an unfamiliar environment. The concept of the tourist guide lies at the heart of the origins of interpretation, and although they may not always recognise it, guides are interpreters and are in a most influential position when it comes to leaving visitors with a particular impression of a place.

(b) Regional Ethnographic and Open-Air Museums

With its roots in Scandinavia and northern Germany, there evolved in the late 19th century the provision of museums based upon collections of traditional buildings and
crafts from a defined region. With the aim of preserving vernacular architecture and folk traditions, they were often located in a park on the edge of a town. They became the focus for educational *and* leisure visits by the population of the city, and the explanation of the architecture, building methods and local crafts were laying the foundations of what we understand as site interpretation today. In Britain we have developed some similar open-air museums such as at Beamish, Ironbridge Gorge, Weald and Downland, and the Highland Folk Museum in Kingussie, Scotland.

(c) North American National Parks

The greatest stimulation to the development of interpretation practice came from the United States and Canadian National Parks. The increasing number of tourists arriving on the new railways and then by road to the Rocky Mountain Parks, such as Yosemite and Banff, in the mid 19th Century required specialist guides and this led to the establishment of park "ranger services". These were specially trained staff who communicated with visitors about the natural beauty of the Parks and attempted to engender a sympathy for the work of the new National Park Services. The development of the concept of the self guided trail, the visitor centre and the camp-fire talks and theatre later developed, and were imported into the United Kingdom largely during the late 1960's and the 1970's (Bayfield and Barrow, 1976).

(d) Environmental Education

During the 1950's and 60's in the United Kingdom there was a significant growth in the concept of outdoor environmental education- the realisation that learning about geology, ecology and history benefited from visits to real places outside the classroom. The field studies movement grew particularly quickly stimulated by the formation of the Field Studies Council, who opened a number of centres in the countryside where school and college students came to study in the outdoors. The specialist staff of these centres developed new techniques for teaching in the field (A Brief History of the FSC at: www.field-studies-council.org)

Benefits of interpretation

Interpretation benefits both the conservation and management of natural and historical resources, and tourism-related economic growth and development. It is possible to identify six main potential benefits of well-planned and well-managed interpretation:

(a) Increased visitor satisfaction and enjoyment.
(b) Improved understanding of the site or area being visited.
(c) Enhanced visitor and resource management through encouraging visitors to follow particular routes and visit particular places.
(d) Improved tourism infrastructure through the provision of carefully managed tourism products.
(e) Increased visitor spend and employment.
(f) Enhanced image for a site or area, valuable for both tourism marketing and for the image of the managing organisation.

Interpretation facilities and services also provide the opportunity for two further benefits:

(g) The involvement of local communities in the presentation of their natural and heritage resources to both themselves and visitors.
(h) The potential to generate volunteers and supporters for the organisation pro-
What is the message of interpretation?

The philosophical basis of interpretation has best been described by Tilden (1957) in the United States and by Aldridge (1975) in the United Kingdom. It is a complex issue with some seeing it as an educational activity trying to change people’s attitudes and behaviour, whilst others prefer to emphasise its practical value in providing entertainment for and the management of visitors. Both Tilden and Aldridge try to distinguish between Perception, Understanding and Appreciation:

Perception meaning recognising that something exists.
Understanding meaning knowing what the thing is.
Appreciation meaning developing a concern for it.

If we accept that interpretation programmes should have some purposes which take the visitor along the road from appreciating that something exists to knowing what it is and wanting to protect it (if that is appropriate), then we are beginning to develop some messages for our interpretation. I suspect that the majority of these messages will relate to why that particular piece of heritage is significant, the importance of preserving our heritage for future generations to enjoy, and what the visitor can do to help. There is a danger when the tourism industry latches on to a new product or approach, these philosophical values and purposes tend to be forgotten in the drive towards economic goals. Interpretation can become trivialised and popularised to such an extent that any of the original purposes are lost.

Planning for Interpretation

Interpretation planning is the process of deciding what should be interpreted, to whom, where, when, and by what methods. It is a process that has application at a number of different scales. An interpretation plan can and should be prepared for a whole Geopark, and at a more detailed level for individual sites within it.

It is important for the managing organisation of a Geopark to carry out this process, which should be closely related to the management of the resource and of the visiting public. The plan will determine what ‘themes’ (or messages) the interpretation will focus upon, and what the objectives of the interpretation programme will be.

Selecting and designing the interpretive media is then required for the successful implementation of projects, such as a visitor centre exhibition or an outdoor panel or leaflet (see the paper by my colleague, David Revell, elsewhere in this journal). If there is no interpretation plan, it is very difficult to produce a successful interpretation programme as the objectives and context for the specific media will not have been identified. Very often designers are employed to produce interpretation media without a site interpretation plan - this is not good practice and can result in a waste of resources, a poor product, and an unsatisfactory visitor experience.

A simple interpretation planning process answers the following questions:

1. What are the special features of this place – ordered in to themes and top-
2. What locations do we want people to visit and where do we not want them to go?
3. Who are the different audiences we want to communicate with?
4. How long do we want different types of visitors to spend on the site and in what locations?
5. What are the constraints of the site – places or objects that could be damaged or places that could become overcrowded, for example?
6. What do we want people to learn, feel and do as a result of interacting with the interpretation? (i.e. learning, emotional and behavioural objectives - see below)
7. What techniques and media should we use to provide the interpretation?
8. What staff will be required and what training will they need?
9. What will the capital and revenue costs of providing the interpretation be?
10. How will we evaluate the programme when it is running and how will changes be made if required?

Objectives for interpretation

It is possible to identify three types of objective for interpreting a Geopark:

Learning Objectives are concerned with what we want visitors to know about the Geopark and its features. These are essentially the educational objectives, and may contain some of the values and attitudinal changes we are trying to get over to our visitors. A good interpretation plan will identify specific topics and themes for the interpretation.

Behavioural Objectives are concerned with what we want the public to do as a result of experiencing the interpretation. These objectives are likely to relate to where we want people to go, what we want them to see, and any specific behaviour we want to encourage. These objectives may relate to the management of the site or to some economic benefits.

Emotional Objectives are concerned with how we want the visitor to feel as a result of experiencing the interpretation. For example, do we want people to feel concerned about the conservation of the Geopark, or do we want them to feel proud of its protection. Possibly we would like some visitors to volunteer and become involved more with the Geopark, and we certainly want them to feel that they have had an enjoyable visit and would recommend it to friends.

What should be interpreted?

It is usual in preparing a site interpretation plan to carry out a thorough survey of its natural and/or historic resources, evaluating what is interesting and significant about the place. All the possible subjects for interpretation can be listed as topics such as particular natural features, its geology, important events and individuals, and any historic and cultural features.

The topics can then be grouped and it should be possible to identify a small number of themes which can tie together a group of topics. Themes are best expressed as a
sentence. An example of a set of topics and themes which Imagemakers prepared for a Geopark in Scotland (Knockan Crag) is shown at the end of this paper.

**Who is the interpretation for?**

It should be possible to identify different market (audience) sectors for visitors and local people to your Geopark. It is unlikely that any interpretation approach will suit all the different types of visitors equally, and therefore it is wise to identify what are the characteristics of each group.

A simple classification of visitor market sectors (or audiences), which could be adapted for a Geopark, could be:

- General visitors
- Families
- Foreign tourists
- Organised Groups
- Local residents (regular casual visitors)
- Educational groups/schools
- Special interest groups or individuals

For each of these audience groups, or for any other form of market segmentation, it will be important to establish:

- Why they are visiting the Geopark
- How long they tend to stay
- What level of interest they may have in the site
- What you would like them to do

Different parts of the interpretation programme can then be tailored to the needs of specific audiences. In particular, it is important to note that children need a completely different interpretation approach to adults.

**Site factors**

Interpretation planning also takes into account any constraints on the Geopark, such as parts of a cave or areas of natural habitat or fragile geology that should not have the public visiting. The capacity of the site to accept visitors and issues such as car parking and toilets should also be considered. This may influence the choice and location of interpretation media and any car parks or visitor centre (Yapp and Barrow, 1979).

The desired circulation pattern of visitors and the capacity of particular parts of the site or service buildings may also be a factor in influencing what should be interpreted where.

**Choosing the most appropriate media**

The factors which should influence media selection will include:
• The character of the Geopark.
• The number of people who will be expected at peak and normal times.
• The characteristics of the audience to whom the interpretation is being directed.
• Whether the visitors are coming only once or whether there are many repeat visitors.
• The suitability of that medium to the target audience.
• How much time and space there is.
• The cost of the approach taken and the available capital budget.
• The maintenance implications and costs.
• The ease with which the approach can be modified.
• The staff required to deliver and sustain the interpretation.
• Whether potential vandalism is an issue.

Monitoring and evaluation

My experience is that many interpretation programmes have poorly defined objectives, and certainly not ones that allow any form of scientific evaluation of their impacts. A Geopark interpretation plan should specify how the interpretation and its impacts on visitors will be evaluated. This begins with having testable, quantified learning, behavioural and emotional objectives, such as:

• 80% of visitors will know that the site is on limestone.
• 50% will know that a particular rare bird nests on the site.
• 10% will make a donation in the donation box.
• The average length of time spent looking at the key feature on the reserve rises from 10 minutes to 30 minutes.
• 95% of visitors will feel that the Geopark is important and should be protected.

Qualitative and quantitative techniques for evaluation the interpretation, such as visitor surveys, questionnaires, behavioural mapping and focus groups, should be outlined in the interpretation plan.

Who should be involved in preparing an interpretation plan?

Interpretation planning is a process that can bring together the different interests there may be in the Geopark, such as those concerned with research, education, conservation, visitor management, and tourism development. This collaborative approach is important in achieving consensus and a high quality experience for visitors.

The role of an external facilitator/interpretation planner is often vitally important. They represent the interests of the visitor to the area, and can bring an external and creative view to the process that will ensure the best outcome in terms of improvements to the visitor experience.
Case study example: Interpretation plan for Knockan Crag, Scotland

I will finish by referring to key parts of an interpretation plan for a geological reserve in Scotland, Knockan Crag, part of the North West Highlands of Scotland Geopark (www.northwest-highlands-geopark.org.uk).

Interpretation themes / messages for Knockan Crag

**Key themes for the interpretation**
1. At Knockan Crag older rocks have been thrust up and over younger ones, making a sequence that is out of the usual order.
2. Knockan is important because discoveries here played a key role in developing geological understanding and theory worldwide.
3. The rocks at Knockan have moved as part of the continuing sequence of Earth’s activity, driven by heat from its molten core.
4. Some fascinating people and geologists were involved in unravelling Knockan’s story.
5. Many different rocks make up the mountains here.
6. The geological processes that occurred at Knockan and in this local landscape happened over an immense period of time, covering hundreds of millions of years.

**Interpretation Objectives**

**Learning objectives**
After exploring Knockan Crag, over 75% of visitors will understand:
- a) That the hillside is made from layers of rock.
- b) That these rocks are not in a ‘normal’ arrangement – the older rocks lie above the younger ones.
- c) That the Earth’s surface is made of plates that drift across the planet.
- d) That Scotland collided with England some 400 million years ago.
- e) That Knockan has played a key role in developing geological theory.
- f) That the present landscape was created over millions of years and was formed due to a range of geological processes.

**Behavioural objectives**
At Knockan Crag, over 75% of visitors will:
- a) Continue along the path to the centre/ Rock Room.
- b) Follow the Rock Route trail.
- c) Visit other sites in the Geopark area and Assynt.
9.3 Emotional objectives
Following a visit around Knockan Crag, over 75% of visitors will feel:
a) Motivated to find out more about the rocks in the area.
b) Amazed at the immense periods of time that were involved in creating this
Geopark landscape.
c) Motivated to explore the site in more detail, and motivated to explore the sur-
rounding Geopark area.

Conclusions
Interpretation in Geoparks is a vitally important service that requires careful planning
to be effective. A commitment to interpretation requires trained staff and regular
monitoring and maintenance for it to be professional. It is worthy of significant in-
vestment. There is much to be learnt from the mistakes and experience gained in the
west, although its application worldwide and in China will have to respond to the lo-
cal social and educational context.

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