

Experience orientated staging of nature oriented and geotourism attractions

– A case study from the European Geopark Vulkaneifel

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Summary

The last decade has seen an experience orientation with a particular focus on leisure parks and new tourist attractions such as Urban Entertainment Centres, Brand Lands or Tropical Baths. But also in cultural urban tourism experience orientation meanwhile plays a major role. The professionalism in staging the original rough tourism product has led to a rise in the level of visitor expectation. Today, even the visitors to natural heritage sites are not satisfied by only watching or walking through the natural attractions, but expect a more sophisticated presentation. Because on-site staging has its limits, a special focus has to be laid on accompanying indoor-facilities which help to expand the experiences made during the real-world visit in the natural environment. The article analyses the factors which have to be fulfilled when aiming at successfully conceiving natural heritage sites.

Taking as an example the European Geopark Vulkaneifel (Germany), the actual presentation of the natural heritage, the needs of the visitors and options for a more state-of-the-art processing, preparation and adaptation are discussed. The presentation is based on empirical findings from a visitor survey carried out in 2008. Apart from several positive findings, different aspects which are left as a desideratum, will be presented:

- quality level and high-performance innovative ways of staging
- distinct identification of the target group
- appropriate target group orientation of the product
- the role of market-communication strategies
- supporting collateral activities.

Apart from the question of how experience orientated staging might be optimised in the study area, another focus is laid on the need to intensify cooperation in order to reach the necessary threshold and improve and increase the attractiveness of the different Geopark sites. With a more performance orientated concept that takes the audience on a thrilling journey into the spectacular geological history of our planet, an even broader public could be addressed and attracted.

1 Increasing experience orientation in geotourism

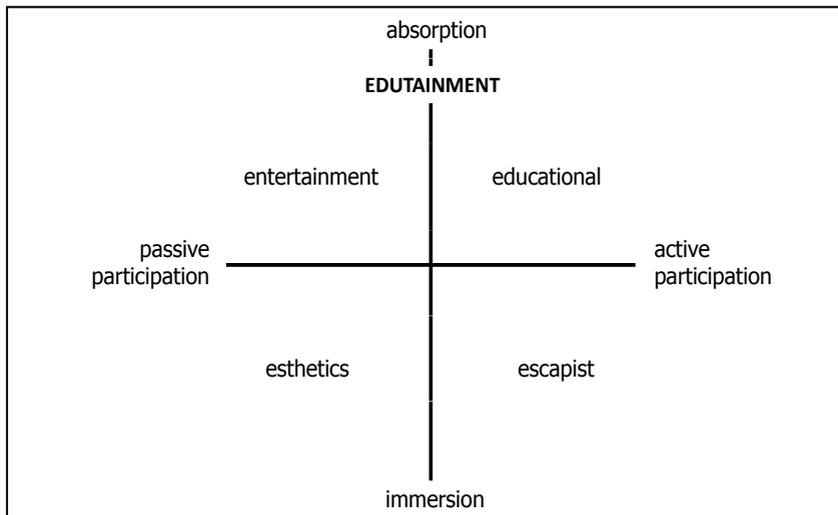
In the last years the way of presenting natural heritage for tourism purposes has seen major challenges and changes. For a long time the traditional presentation of natural (as well as cultural) heritage in museums focused on the scientific substance and a high level of scientific correctness. Therefore the image of museums is more marked by an expectation of solid scientific backing than the expectation of an attractive and entertaining presentation of interesting facts and contexts.

At the same time under the umbrella of the term “geotourism” the focus on natural attractions as generator for tourist arrivals in rural areas has risen. Especially in mountainous regions where the results of geological processes sometimes show impressing formations and situations the attention given to geological phenomenons is rising. But geotourism not only wants to turn the attention towards the aesthetic and often impressing results of geological and geomorphological processes. At the same time the creation of an understanding for the natural processes is intended as well.

But regarding the developments in other fields of leisure and tourism where especially since the 90ies new ways of creating tourist experiences have been developed the offer of additional information on geological or geomorphological processes has to face the challenge of other offers in the tourism market with whom it has to compete if it wants to attract visitors. As *Pine & Gilmore* have expressed in their article which started the discussion on the experience economy: “Today the concept of selling experiences is spreading beyond theatres and theme parks” (1998, p. 99).

Pine & Gilmore have distinguished four approaches through which experience can be generated (cf. fig. 1). In the discussion on the experience economy dur-

Fig. 1: The four dimensions of experiences



Source: *Pine & Gilmore* 1998, p. 102

ing the last decade (cf. for example *Smith & Onderwater* 2009 documenting the ATLAS conference on this subject) special attention has been given to only one aspect of experience, referring to passive participation and absorption of stimuli: the entertainment dimension.

This is the kind of experience most of the leisure parks are targeting at. A short-term arousal, which offers especially physical stimuli to the senses. Because roller coasters are the typical representative of this kind of entertainment sometimes its also referred to as the “roller-coaster-effect” (cf. fig. 2).

Fig. 2: Experience orientated offers of the 90ies adressing the arousal aspect



Source: www.coastersandmore.de

Apart from the traditional leisure park attractions and theme parks this concept has been widely used in thematic staging of different types, one of the most famous perhaps being the thematic orientation of hotels in Las Vegas (cf. fig. 2 above right). Apart from the fact that these stimuli wear out quite quickly and therefore always new, more exiting stimuli have to be given (a process which is sometimes called experience spiral), these types of experience are not what is headed for when looking at natural and cultural heritage. There, the dimension of active participation and absorption of information is traditionally used. The visitor should actively absorb the given information, an experience *Pine & Gilmore* are calling “educational”.

The presentation of natural and cultural heritage now found itself before the background that the visitors became more and more used to exiting stimuli faced with a situation that their offers have been perceived as less and less attractive.

One way out of this dilemma has been the search for experiences that demand less effort from the visitor when acquiring the given information. Those approaches which give easier access to the information by integrating entertaining elements and approaches have come to be known as “edutainment” (cf. fig. 1).

Edutainment at the same time refers to a much more comprehensive understanding of “experience” than the Pine & Gilmore approach. Taking the five dimensions *Unger & Kerman* defined already in 1983 as determining experience:

- 1 Perceived freedom
- 2 Involvement
- 3 Arousal
- 4 Mastery
- 5 Spontaneity

edutainment tries to involve the visitors, to give them much more choice as a pre-defined setting in a leisure park, and let them act spontaneously in a setting that they can master according to their own interests (cf. fig. 3).

Fig. 3: Edutainment offers in museums of the European Geopark Vulkaneifel



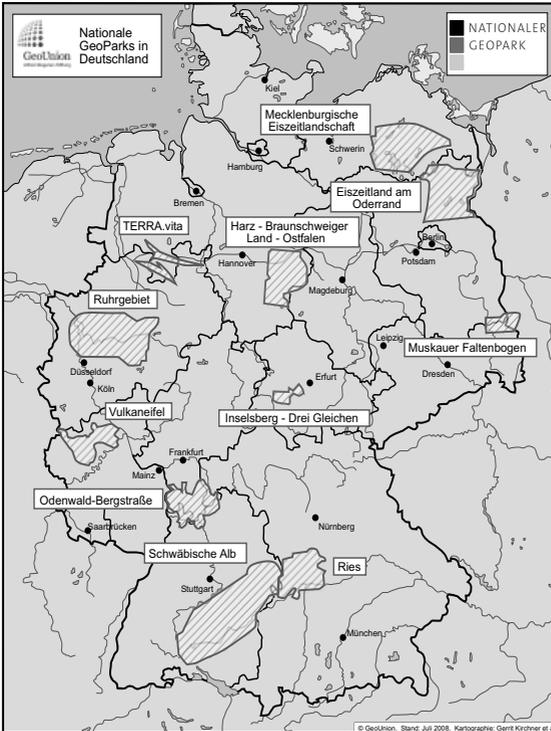
Source: own photographs

But the question remains as to whether these approaches to activate the visitors of nature oriented tourist attractions are still sufficient to meet the expectations and demands of the visitors. Findings from culture orientated urban tourism suggest that the “experience spiral” which makes it necessary to continuously develop the offer in urban tourism may apply to nature oriented and geotourism offers as well (cf. *Kagermeier* 2009). In culture oriented tourism the activation of tourists tries to let them immerse into specific settings (to a certain extent even referring to the flow-concept of *Csikszentmihályi*, 1990) towards a more comprehensive experiencing of the historic past. Historic re-enactment as a means of creating specific longer lasting and not only superficial experiences is much

easier when dealing with historic cultural aspects. But in the field of nature and geological processes this direct involvement of the tourists cannot easily be achieved. So the central question is, whether and how the tourists in nature-oriented and geotourism could be activated and integrated into the setting so that they become absorbed in the sense of a more profound experience.

2 The European Geopark Vulkaneifel

Fig. 4: National Geoparks in Germany in 2008



Source: www.geo-union.de

Fig. 5: Logo of the German National Geoparks



Source: www.geo-union.de

Geoparks are a quite new approach of trying to use geological or geomorphological phenomena to enhance the attractiveness of a tourism destination. Since the first denomination of National Geoparks in Germany according to the UNESCO-criterias in the year 2002 eleven National Geoparks have been established (cf. fig. 4; for more details see e.g. Niklas 2008). Covering different geological and geomorphological features that range from the meteorite crater of the Ries to the pleistocene landscape in Mecklenburg-West Pomerania most of these Geoparks are situated in German low mountain ranges. The German Geoparks are organised under the

umbrella of the „Alfred-Wegener-Foundation“, a geoscientific organisation, and are marketed under the brand of „planet erde“ (cf. fig. 5). This organisational structure means that a main focus is put on the scientific aspects whereas tourism aspects sometimes seem to play only a secondary role in this network.

Apart from the national network of Geoparks in the year 2000 a European network of Geoparks was established as well. In the meantime 34 Geoparks in 13 European countries have joined this cooperation trying to promote the ideas of Geoparks and to exchange ways of promoting them for tourism purposes (cf. fig. 5).

Fig. 6: European Geoparks in 2009



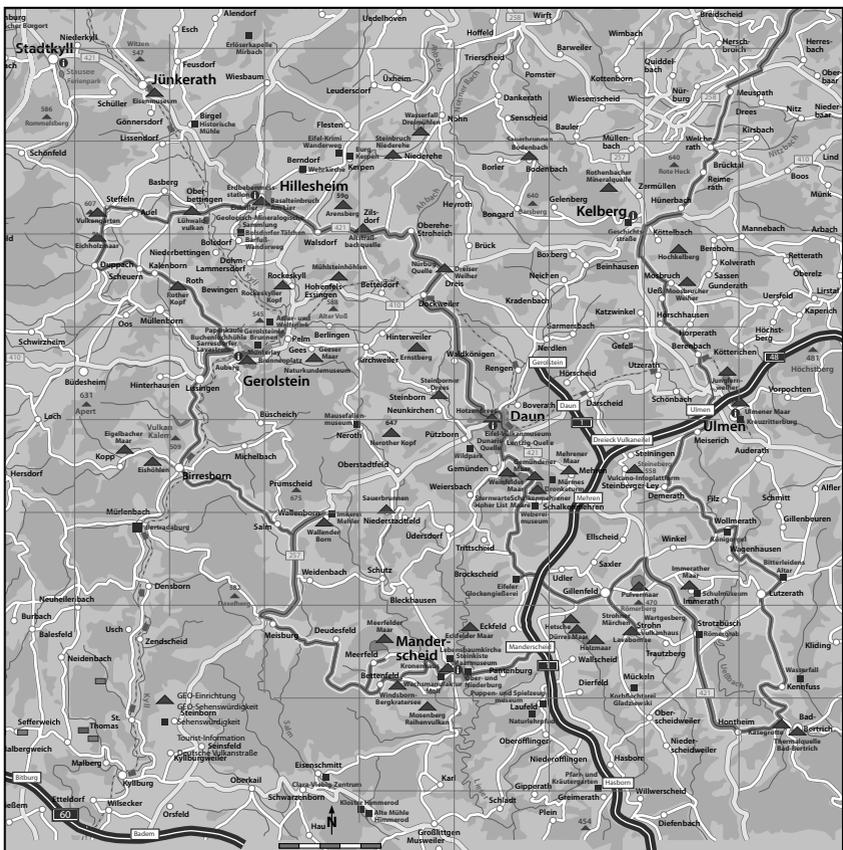
Source: Natur- und Geopark Vulkaneifel 2009 (www.europeangeoparks.org)

In Germany six Geoparks are part of the European Geopark network (some of them being national Geoparks at the same time):

- 1) Naturpark Bergstraße-Odenwald
- 2) Terraviva Teutoburger Wald
- 3) Geopark Harz Braunschweiger Land Ostfalen
- 4) Schwäbische Alb
- 5) Mecklenburgische Eiszeitlandschaft
- 6) European Geopark Vulkaneifel.

In the Eifel there is the odd situation (due to the German federal system), that the whole Vulkaneifel belongs to the national Geopark network whereas only its western part is a member of the European Geopark network (cf. fig. 06). The European Geopark Vulkaneifel covers mainly the area of the administrative district "Vulkaneifel".

Fig. 7: Area of the European Geopark Vulkaneifel



Source: Natur- und Geopark Vulkaneifel 2009

Fig. 8: Volcanos of the Eifel: the pleasant nowadays situation does not give an impression of the extreme conditions of their genesis



Source: Natur- und Geopark Vulkaneifel 2009

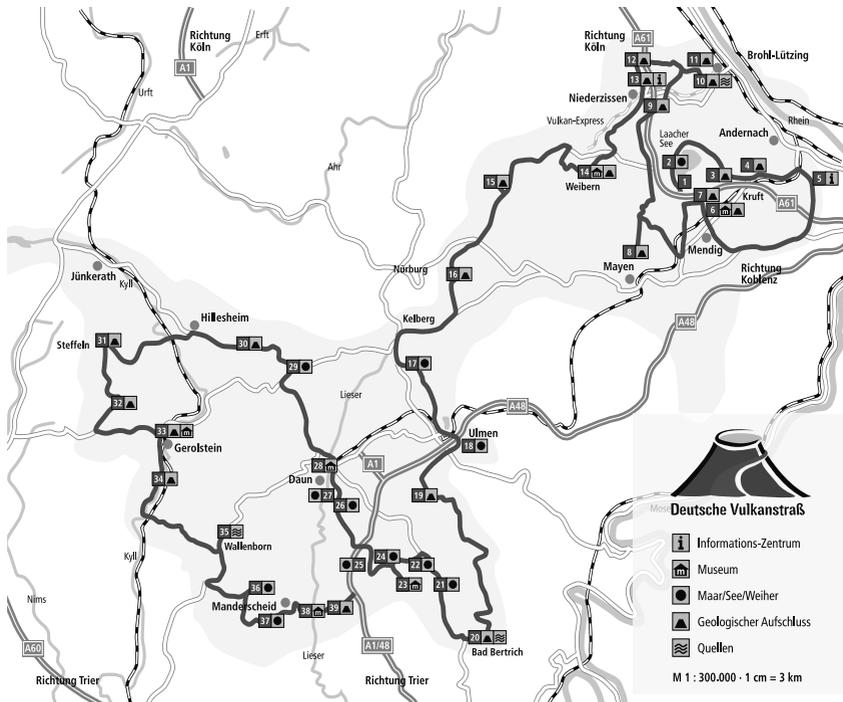
In the case of the European Geopark Vulkaneifel an additional challenge for communicating geological processes to the visitors and induce an understanding has to be met. The results of the volcanic past in the low mountain range of the Eifel (in the Western part of Germany near the border to Belgium) are mainly formed by maars which are lakes in the volcanic craters. These lakes are often surrounded by forests because the steep slopes are not apt for agricultural use. Thus, the situation is characterised by a certain amenity and quite pleasant atmosphere in the surrounding of the former volcanos.

So the main challenge when trying to establish a geotourism offer in the Vulkaneifel is to create opportunities where this volcanic past comes alive. Thus, apart from

on-site information at the geological sites in the Vulkaneifel, supporting indoor-offers try to induce an understanding of the volcanic past of the region.

A second challenge for the marketing of the Vulkaneifel to tourists is the organisational aspect that the western part is branded as European Geopark whereas the eastern part counts as German Geopark. To tackle this separation, the so-called "Deutsche Vulkanstraße" (German volcano route) has been created in 2006 as a common tourism marketing tool that covers both parts of the Vulkaneifel (cf. fig. 9). The objective of this common marketing tool is to induce synergy between these two parts, each of which has a specific tourism potential and specific target markets. So when evaluating the presentation of the geotourism offer in the Vulkaneifel this aspect of internal cooperation was also taken into account.

Fig. 9: Deutsche Vulkanstraße (German volcano route) in the Vulkaneifel



Source: Deutsche Vulkanstraße 2008

3 The methodological design

The fact that indoor information offers play a central role meant that the evaluation of the quality of the experience orientation in the European Geopark Vulkaneifel had to focus on the information offer in the museums. Therefore the study focused on three museums where information on the volcanic past of the region is provided:

- 1 Eifel-Vulkanmuseum Daun
- 2 Maarmuseum Manderscheid
- 3 Vulkanhaus Strohn

(number 28, 38 and 23 in fig. 9). The Eifel-Vulkanmuseum is run by the district Vulkaneifel whereas the two others have been established by the local parishes. As a fourth sample point the so called “Maarsattel” near Daun has been chosen, because it is one of the most famous spots in the Vulkaneifel where three maars can be seen at one time (number 27 In fig. 9; cf. fig. 8).

The oldest of the three museums, the Vulkanmuseum Daun (located in a former administrative building; cf. fig 10) was already founded in 1996. Today it receives about 20.000 visitors per year. Because the Vulkanmuseum Daun is the oldest of the three museums its didactic approach is the most traditional. Apart from different glass show cases only very few interactive elements are to

Fig. 10: Vulkanmuseum Daun

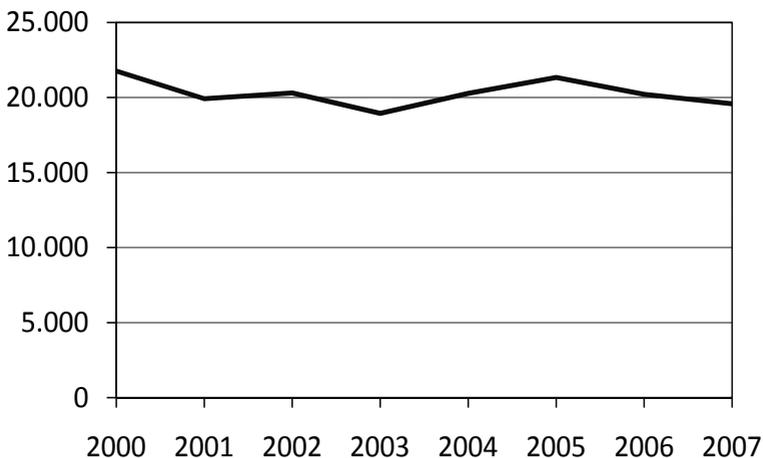


Photos: A. Kagermeier & I. Bradic

be found. At the same time the atmosphere in the exhibition is quite sober. One of the problems during the investigation has been that interactive elements were out of order.

The second example, the Maarmuseum Manderscheid was established in 1999. About the same number of visitors as in Daun are counted there per year (cf. fig. 11). It has to be stated that the number of visitors stagnated in the last year and that for example the opening of the German volcano route did not have

Fig. 11: Number of visitors at the Maarmuseum Manderscheid



Source: Maarmuseum Manderscheid

Fig. 12: Maarmuseum Manderschein



Photos: A. Kagermeier & I. Bradic

a positive impact on the number of visitors to the museum, although the number of visitors in the whole region is rising.

The Maarmuseum in Manderscheid had once been the local town hall so it offers a great space which has been equipped with a number of three-dimensional show cases and dioramas. A certain thematic emphasis is put on the aspect of succession in the former craters during the silting up process. One of the major attractions of the Maarmuseum is some kind of drilling core (above in the middle in fig. 12) which shows like a time-machine the development of the crater since the last eruption with an audio-visual animation. Other audio-visual installations show that Manderschein quite clearly follows the early ideas of edutainment offers.

The third museum in Strohn is the youngest of the three (cf. fig. 13). Opened in June 2002 in a former farmhouse it is the smallest exhibition in the sample with only limited space available. The museum is very intensively trying to convey the impression of the heat and the atmosphere of active volcanos. The intensive use of orange colours and lights as well as some interactive installations are showing quite an opposite setting compared to Daun.

In co-operation with the Vulkaneifel a visitor survey at the four selected sample points has been carried out in summer 2008. The field work has been integrated into a study course of our department (cf. Bradic 2009). The methodological design comprised not only face-to-face interviews with the visitors. Apart from that observations of the visitors have been carried out and some elements of Mystery Guest approaches were used as well. The mix of different quantitative methods of collecting data has been proven to produce reliable results which complement each other already in another comparable survey (cf. Kagermeier 2006).

Fig. 13: Vulkanhaus Strohn



Photos: Vulkanhaus Strohn

In total the students have interviewed 568 visitors at the four sample points during different days of the 2008 season (before, during and after the summer holidays, during the week as well as the week-end) to achieve a more or less representative sample.

4 Empirical findings

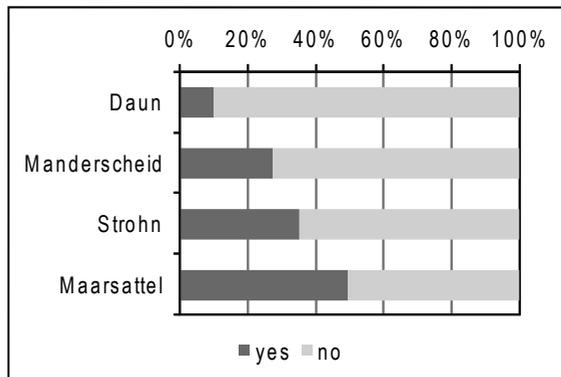
Almost three-quarters of the visitors were overnight guests in the region, thus showing the importance of geotourism presentations for providing attractive offers to tourists in low mountain ranges. With about one million overnight stays the district Vulkaneifel is an important destination in this part of Germany. Due to the proximity of the Netherlands and Belgium these two nationalities constitute the main incoming markets in the Eifel. The percentage of Dutch tourists (15 %) and Belgian tourists (5 %) in the sample (only overnight guests) is comparable to the share of these two nationalities in the accommodations of the district (*Statistisches Landesamt Rheinland-Pfalz, 2009*).

Recommendations are one of the most effective and at the same time cheapest marketing instruments. Their importance is supposed to rise in the next years according to a growing importance of the Social Web where recommendations of testimonials tend to have a much broader scope than the traditional word-of-mouth marketing.

The portions of visitors to whom the visit has been recommended differs significantly between the four locations. The lowest recommendation rate with only 10 % has been found in Daun, the oldest and quite “traditional” museum. Manderscheid and Strohn are achieving higher scores of recommendation. For Strohn

more than one third is a quite reasonable value which signifies a good quality of the offer (cf. Kagermeier 2010, p. 32). But the most impressive value is achieved by the Maarsattel, where almost half of the questioned visitors said that the location has been recommended to them.

Fig. 14: Visitors coming on recommendations



Source: Visitor survey 2008

4.1 Visitor satisfaction

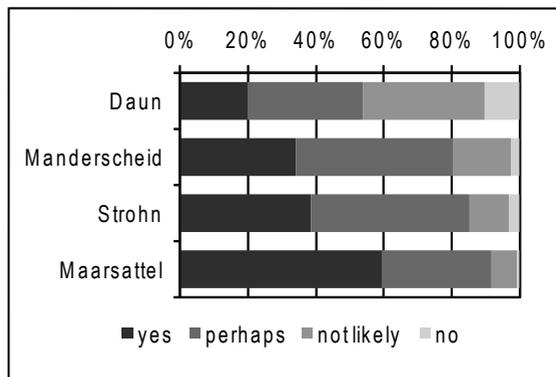
This relation between the four sample points is to be found as well, when asking for the overall satisfaction with the visit. On a scale from 1 (= very good) to 4 (= very poor) the Vulkanmuseum Daun got a mean value of only 2.06. The Maarmuseum Manderscheid has been rated 1.72 and Vulkanhaus Strohn 1.61. Almost the same result (1.62) has been calculated for the visitors of the Maarsattel. This means, that the traditional concept of the Vulkanmuseum in Daun is not highly estimated by the visitors compared to a more activating setting in Strohn. Taking into account the fact that there are about 1 million overnight stays only in the district Vulkaneifel and a total of almost 10 million overnight stays in the whole Eifel (*Statistisches Landesamt Rheinland-Pfalz*, 2009) – which can be seen more or less as the catchment area for the overnight tourists – the museums in the Vulkaneifel are only attracting a very small portion of the potential market segment.

Apart from the overall satisfaction different aspects of the offer have been rated as well: the design of the information panels, the content of the given information, the quality of the interaction and the ambiance in the museum. There were no great differences from the overall rating to be found when looking at these details of the presented offer. Only the ambiance in the Vulkanhaus Strohn got an extraordinary good rating (even compared to the good score at the overall satisfaction). This means, that a good ambiance is especially appreciated and esteemed by the visitors of geotourism museums. This refers perhaps to the great contrast between the green and quiet natural surrounding and the roaring heat of liquid lava flows and lava bombs.

Another aspect giving indications on the visitors' satisfaction is the question as to whether they intend to repeat their visit at a specific site. Again the same order as for the other indicators is to be found (cf. fig. 15). But at the same time it has to be stated, that even the Vulkanhaus Strohn got only 40 % of potential repeaters. The natural landscape at the Vulkansattel produced quite contrary re-

sults. There 60 % of the visitors intend to come back again. This means, that even though the Vulkanhaus Strohn got quite positive ratings its offer is not perceived as being attractive enough to come back again. The small size of the three evaluated museums has to be seen as a constraint for a more comprehensive offer which would attract visitors to come back again. At the same time it can be assumed, that the experience orientation – even at the Vulkanhaus Strohn – is not yet as sophisticated and well developed to induce high repeater shares.

Fig. 15: Intention to repeat the visit



Source: Visitor survey 2008

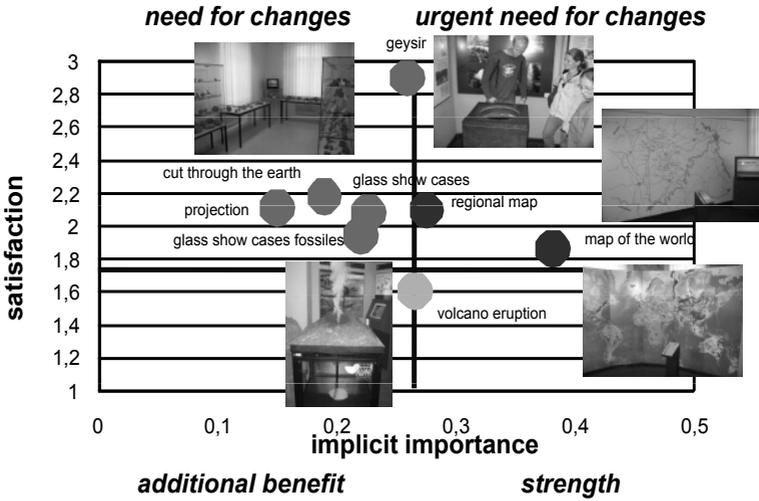
To further identify the necessity where to take action not only the rating of overall characteristics for the museums has to be taken into account, but a more detailed evaluation of the specific parts and settings has to be carried out. Thus the visitors' rating of the particular parts and settings of the museums can be correlated with the overall satisfaction (i.e. the implicit importance) and then divided into four categories

- 1 high correlation with good overall ranking and a good rating of the specific setting shows the **strength** of a facility
- 2 high correlation and poor (overall and specific) ratings show an **urgent need for changes**
- 3 poor ratings for a specific part of a museum but only low correlation with the overall satisfaction indicates **need for changes** and
- 4 good ratings for a specific setting but only low correlation with the overall satisfaction is called "**additional benefit**" because the good ratings do not strongly influence the general impression of a visitor (i.e. this is not a relevant salient factor).

When visualising the results for the Vulkanmuseum Daun (cf. fig. 16) it is not astonishing that most of the different parts of the museum show an (urgent) need for changes, because an overall satisfaction below average is (highly) correlated with a poor rating of the specific setting and thus showing poor experience quality. Only one interactive element (the volcano eruption) can be seen as a strength of the museum. Another element with interactive options (the geyser) which was out of order during the whole period of the survey arose expectations of the visitors and then disappointed them, because the station did not function.

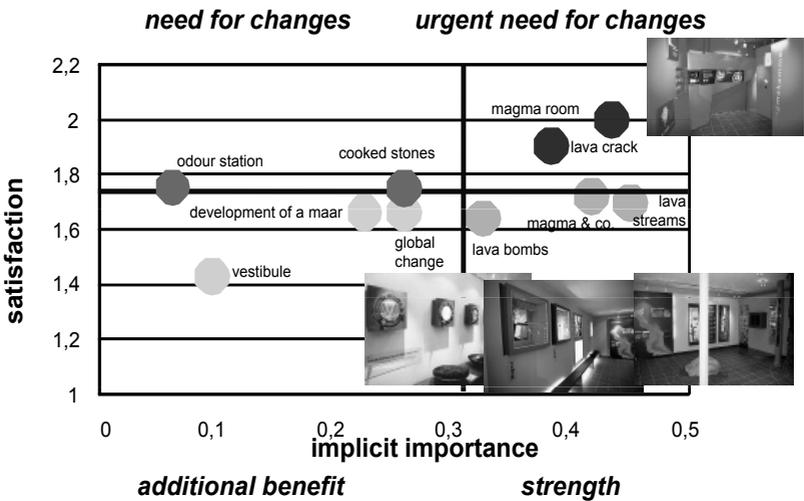
But even the results for the best of the three museums at Strohn (cf. fig. 17) show, that even there not all the expectations of the visitors are met, although

Fig. 16: Ranking of relevance for taking action at the Vulkanmuseum Daun



Source: Visitor survey 2008

Fig. 17: Ranking of relevance for taking action at the Vulkanhaus Strohn



Source: Visitor survey 2008

some settings can be called “strength”. This applies especially to those settings where the heat and the noise of a volcano eruption is simulated by colours and audio-visual presentations in combination with interactive elements. And again one of the interactive elements which does not work (magma room) has been positioned in the quadrant “urgent need for change”. At the same time it has to be pointed out, that interaction does not automatically mean good rating. The odour station seems to be a convincing interactive setting which addresses all senses, but the visitors did not esteem this kind of interactive setting, because the experience has not been as convincing as expected.

To sum up it has to be concluded that the visitors’ satisfaction at the four different sample points shows a clear differentiation in their experience quality. But even at the comparatively good museum, options and needs for amendments towards a more sophisticated experience orientation have been identified.

4.2 Results from observations and mystery guest visits

Apart from the questioning of the visitors, so called “objective” approaches (cf. *Kagermeier* 2006, p. 138) of measuring the quality of the offer in the three museums have been conducted additionally. The intention has been to identify some more details concerning the strength and weaknesses of the specific settings. Therefore the visitors and their behaviour were observed at different stations in the museums. With the same intention of identifying specific details of the presentations the students conducted mystery guest visits in the museums (before doing the visitors survey so that these results did not influence the mystery guest approach).

The two approaches focus on three aspects of the presentations in the museums which are estimated to represent their effect on the visitors:

- the **textual** information given (representing cognitive stimuli)
- the reactions on the **exhibits** (representing affective stimuli)
- the **interactive** opportunities dimensions (representing social stimuli).

In the following some selected results from the two museums in Daun and Strohn - which have been rated best and worst in the visitor survey - will be presented, in order to see whether additional information can be derived from the complementary approaches.

4.2.1 Vulkanmuseum Daun

At the Vulkanmuseum Daun the only exhibit that has been categorised as a “strength” (cf. fig. 16) is the model of a volcano eruption. This can be put into action by the visitors simulating the rise of the lava below the surface until the eruption takes place and smoke rises from the crater (cf. fig. 18). In the visitor survey the model of the volcano eruption got the best ratings especially from families with children. During the observations of the visitors this has been confirmed. Mainly children were fascinated and reacted enthusiastically to the animation. But it has to be stated, that only 50 % of the visitors employed this model. The reason can be seen in a lack of textual information on the model. Other visitors that were already using the model gave an idea of its functioning. But visitors

Fig. 18: Model of a volcano eruption at the Vulkanmuseum Daun



Photo: A. Kagermeier

Fig. 19: Model of a geyser at the Vulkanmuseum Daun which has been out of order during the survey



Photo: I. Bradic

that were alone in the room sometimes did not understand what the model was about or that it could be put into action. Adult visitors without children gave the impression that for them the setting looked too childish.

Adult visitors might have been stimulated by additional information about how to use the model. This was reflected in the results of the mystery check where the model received good ratings for “arising curiosity” and the “quality of the interaction” but poor results for the “content of the information board”.

The exhibit with the worst ratings at the visitors survey has been the model of a geyser (cf. fig. 19). Thought as another interactive element of the exhibition this exhibit has been out of order during the whole summer when the survey has been carried out. But neither a note on the fact of being out of order nor an information board on the principle

of the model had been installed. This of course irritated the visitors. Almost one third of the observed visitors passed the station without even taking notice. The only reaction of visitors that could be observed was wondering and irritation about what should it be about. Hence, one of the fundamental conditions of an experience-oriented presentation, the zero defect production ideal where perfection up to the last detail is the goal and which has been pointed out by Romeiß-Stracke (2006, p. 43), has been totally violated.

Fig. 20: Glass show cases with different rocks testifying volcanic activities at the Vulkanmuseum Daun



Photo: A. Kagermeier

As a third setting at the Vulkanmuseum Daun a room which contains glass show cases with different stones and rocks that were found in the region and represent the result of the volcanic activities in the past shall be discussed. Even if some explanatory information was given, these rooms were almost totally neglected by families with children. After only a few seconds most of the families left the room which offered no interesting stimuli to them. Even other visitors only looked a few moments

at the exhibits, but no interactions with accompanying members of their group were registered. This poor interactive situation has been reflected by the results of the mystery check as well. The items “stimulating curiosity” and “quality of the interaction” got the poorest results from the mystery guests. But even the “design of the information boards” and the “content of the given information” were rated quite poorly. This means that the room is not attractive to visitors seeking edutainment by stimulating interactive experience settings. Equally, those being interested in educational in-depth information were not satisfied.

To sum up it has to be stated, that the poor ratings of the visitors survey have been confirmed by the two additional approaches. At the same time the observation and the mystery check delivered more detailed information about how and why the museum does not satisfy the needs of the experimental seeking visitors.

4.2.2 Vulkanhaus Strohn

The Vulkanhaus Strohn achieved quite good ratings at the visitor survey. Especially the interactive setting in the museum with its edutainment approach attracted the visitors. One of these stations was the presentation of lava bombs (cf. fig. 21). This example shows that sometimes quite simple settings which allow interaction of the visitors may be perceived as quite attractive and stimulating.

The lava bomb station supplies nothing else but different stones which flung out during volcano eruptions. Because of their specific chemical composition and the abrupt cooling during the flight they have got quite differentiated surfaces and at the same quite different specific weights. Because the different

Fig. 21: Lava bombs at the Vulkanhaus Strohn



Photo: I. Bradic

and pointing out experiences with specific lava bombs to the neighbouring visitors.

This station also got good marks during the mystery check. These referred to both the information provided and the experiences which could be made. At the same time the aptitude for different visitors from children to experts has been rated highly.

Quite the contrary has been observed at another station which is intended to be the most impressive station of the whole museum. A huge lava crack which had been discovered near the village of Strohn has been the reason for establishing the museum. The lava crack (cf. fig. 22) has

Fig. 22: Lava crack at the Vulkanhaus Strohn



Photo: A. Kagermeier

lava bombs are presented in bowls they can be touched and lifted. The simple tactile stimuli by which the visitors can experience the structure of the surface and the (sometimes astonishingly and unexpectedly high) weight of the lava bombs attracted most of the visitors. So on average the visitors spent about 5 minutes at this station. At the same time intensive communication within the group of visitors could be observed, exchanging impressions

and pointing out experiences with specific lava bombs to the neighbouring visitors. The lava crack (cf. fig. 22) has been cut into pieces and reassembled within the museum (after breaking down some walls inside the building so that the entire lava crack could be exhibited).

The great effort which has been made to build up this central exhibit of the Vulkanhaus Strohn stands in contrast to the attention the visitors are paying to it. It has been rated below average during the visitor

survey (cf. fig. 17), and during the observations it had to be discovered that most of the visitors were only superficially looking at the lava crack that forms some kind of wall within the museum. Even if the explanatory textual information given was looked at by most visitors only few of them read them thoroughly. Almost no interaction between the visitors could be observed. At the same time the results of the mystery check suggest that even if the textual information shows a good quality, the curiosity of the visitor is not stimulated and no specific new experiences were to be stated. This means that the effort given to a specific exhibit does not necessarily result in a corresponding esteem of the visitors.

As a third example at the Vulkanhaus Strohn the “magma room” shall be looked at. This multimedia room (cf. fig. 23) totally kept in orange colour and orange light to induce the feeling within an active volcano got one of the poorest ratings during the visitor survey. The results from the observations of the visitors show that almost all of them were attracted by the specifically coloured atmosphere and entered the room. But most of

Fig. 23: Magma room at the Vulkanhaus Strohn



Photo: Vulkanhaus Strohn

them left the room quite soon after discovering that the interactive opportunities could either not be used easily (because of missing explanatory indications) or did not work at all. The observed communication between the visitors referred mainly to the malfunction of the exhibits. During the mystery check the interactive options got outstanding rates. But this refers to visitors who are really keen on discovering the different interactive opportunities. The ordinary visitor did not show this high level of interest to discover on his own the interactive settings which lacked explanatory notes that can easily be understood.

That the time visitors are spending in a museum can to a certain extent be interpreted as an indicator for the quality of the offers is suggested by the findings in the two museums. At Daun some visitors already left after 5 minutes, with an average of 40 minutes. At the museum in Strohn – although it is smaller in size – the average duration of stay has been 58 minutes (with a minimum of 10 minutes).

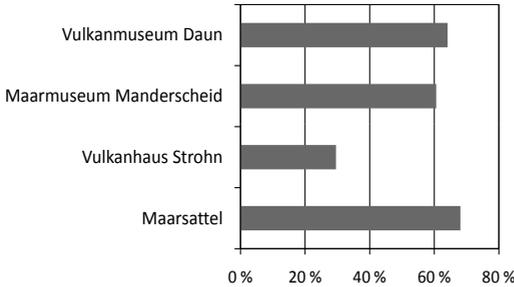
4.3 Synergy effects between the the sample points

Given the fact, that the museums are part of the German volcano route their main aim is to visualise the processes which led to the appearance of the volcanic heritage in the Eifel. The visitor in the Eifel shall be able not only to experience

the present-day landscape but also to get an understanding and experimental feeling of the volcanic past of the region which led to the actual landscape.

However, it has to be stated that the common marketing of the region under the umbrella brand of “Deutsche Vulkanstrasse” is not as effective as one might have expected. Only two third (69 %) of the questioned visitors at the four sample points had ever heard of the term “Deutsche Vulkanstraße”. And 45 % did not know that the places where they were questioned at are part of the German volcano route.

Fig. 24: Visiting only this location



Source: Visitor survey 2008

Fig. 25: Lava bomb at Strohn



Photo: I. Bradic

At the same time the visits of attractions along the volcano route are only to a very limited extent linked with the visits of other attractions. Two thirds of the visitors at the Maarsattel said, that this was the only attraction on the volcano route they were visiting that day (cf. fig. 24). Almost the same range resulted for the Vulkanmuseum Daun and the Maarmuseum Manderscheid. The rate is significantly lower in Strohn with only one third of one-stop-visits.

But this refers to the fact that only a few hundred meters away from the Vulkanhaus Strohn another attraction which is part of the German volcano route, a big lava bomb (cf. fig. 25) is visited by almost 60 % of the visitors of the Vulkanhaus.

The basic idea of the museums along the German volcano route is that some background information on the geological past of the volcano landscape is provided there. However, it has to be stated that this idea of combining visits at the natural heritage sites with visits to indoor facilities is to a great extent not followed by the visitors. From the visitors at one of the outstanding viewing points in the region, the Maarsattel,

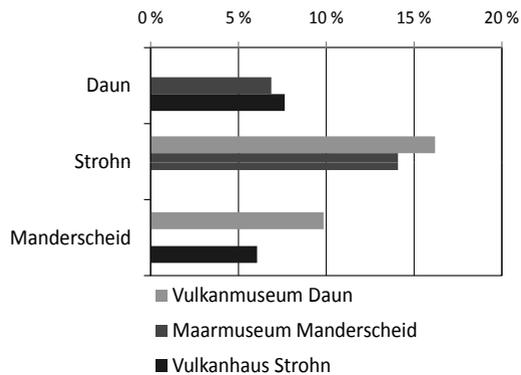
only very few visit the neighbouring museums, the Vulkanmuseum Daun (3.7 %), Maarmuseum Manderscheid (4.9 %) or the Vulkanhaus Strohn (2.5 %).

A similar result was found when questioning the visitors of the museums. Only a small part of them are combining the visit at the museum with other places along the volcano route. Those visiting other maars stayed mainly in the western part of the volcano route i.e. in the area of the European Geopark Vulkaneifel. Almost nobody in the sample has visited attractions in the eastern part belonging to the national Geopark Vulkaneifel.

At the same time only few of the visitors visit more than one museum (cf. fig. 26). Only from those questioned in Strohn about every seventh has visited or has the intention to visit one of the two other sites. Two reasons for this could be identified: One of the reasons is that in Manderscheid and Daun almost no information is to be found about the two other sites. So almost no cross-marketing activity takes place.

The other reason is that the three museums do not have established a clear complementary profile. So even if the visitors know that there are other museums, they are not stimulated to go there to get further information on other fields of the volcanic past.

Fig. 26: Visiting only other museums



Source: Visitor survey 2008

5 Conclusion

In this article the situation for an experience-orientated staging of nature-oriented geotourism attractions has been analysed, taking as an example the European Geopark Vulkaneifel. The findings refer to two different fields of providing visitor attractions in nature-oriented and geotourism, the quality and experience orientation of the offer itself and the cooperative marketing of the product.

Experience orientation of the offer

The findings indicate that the current offer of giving an understanding of the volcanic past of the study region to the visitors has quite a few shortcomings.

- 1 The offer in the geotourism museums has only very limited orientation towards an experience-orientated presentation.
- 2 A traditional presentation is not really esteemed by the visitors which expect an up-to-date setting even when visiting natural heritage sites.

- 3 Apart from the ordinary experience-orientated components like the creation of imagination and the feeling for unique and exceptional attractions the zero defect challenge is often not met. Giving promises of a specific experience which cannot be fulfilled because of defects of the attractions is the most severe weakness in the studied museums.
- 4 The experience orientation does not necessarily mean that huge investments are necessary. To arise the interest and the curiosity of the visitors, interactive options which stimulate the communications between the visitors sometimes need only quite simple stimuli.

Cooperative marketing of the product

Apart from the quality of the offer itself the findings indicate some weaknesses in the marketing of the product and the cooperation between the different stakeholders. These aspects are quite typical of offers in low mountain ranges where the development of the structures has taken place over a long period of time and quite different stakeholders with their own interests are playing an important role. Contrary to a centrally planned and run leisure park, in rural regions usually no holistic concept of the presentation and marketing of the tourism product is to be found.

- 1 The small number of visitors indicates that the tourists in the Vulkaneifel are only to a limited extent aware of the edutainment offer referring to the volcanic past.
- 2 The very limited combination of visits to the natural sites and the museums indicates severe shortcomings in the market-communication. Low word-of-mouth recommendation rates of course are interlinked with the quality of the offer. But a more offensive indication of the different offers linked along the German volcano route should be implemented to induce more combined visits (or at least raise visitors' awareness of other attractions that are still to be seen during later visits and thus induce repeater-rates).
- 3 The fragmentation of the marketing activities with very differentiated responsibilities hinders a comprehensive impression of the whole volcanic offer.
- 4 The best solution for the Vulkaneifel might be a central information centre where the different aspects are presented in an adequate, experience-orientated way. But because this is not a realistic option due to the different responsibilities, the second best option might be a clear "division of labour" between the three museums in the region, where each of them deals with a clearly defined aspect of the volcanic past.

The findings can be seen as quite typical for low mountain ranges where traditionally a wide range of different small stakeholders are trying to promote the tourism potential of a region. The limited size of the stakeholders is often linked to limited capacity and professionalism. Thus, the challenge for low mountain ranges is to establish structures that try to integrate the different interests and raise the level of professionalism in order to produce competitive offers in low mountain ranges. But of course to a certain extent this is only wishful thinking and cannot be realised from one day to the other but is a complex process which takes a long breath.

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