# INTERPRETING THE PONTA DE SÃO LOURENÇO

# By Isolda FERREIRA1

ABSTRACT: Madeirans and tourists have different views, opinions and expectations concerning their visit to the Ponta de São Lourenço. In order to estimate the value visitors assign to the site, a survey was carried out. It also helped to gathered information of visitor characteristics. An interpretive approach has also been suggested and some proposals designed for the site, to enhance the visitors' enjoyment, understanding and awareness of its conservation.

#### INTRODUCTION

Madeira, a Portuguese island in the Atlantic Ocean, is well known for its beautiful landscape, its variety of indigenous and introduced plants and its good weather. This has attracted many tourists for years. However, tastes have changed, and the present day northern european tourists are likely to have interest also in local geology and natural history.

There are many places in the island where environmental problems are increasing and threatening its wildlife and landscape. There is a need for prompt action and to call for public attention for their conservation. The Ponta de São Lourenço is such an example. The removal of sand from the dunes can damage the whole site. Can interpretation help minimize these problems?

Before analysing these matters it is essential to clarify the meaning of interpretation. It can be defined as "the process and art of education, dealt with in an informal sense, whose aim is to provide opportunity for people to discover their environment, and so become concerned about its conservation. This

<sup>&</sup>lt;sup>1</sup>R:Gal. Gois Monteiro, 8-BL.E/1004, Botafogo - Rio de Janeiro -RJ, Brazil -CEP:22290



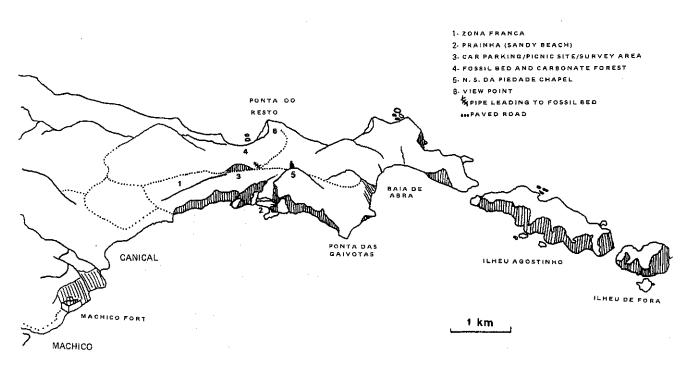


FIG. 1

should be done in a way that causes people to become totally involved with the place visited, whilst enjoying leisure at the same time." Interpretation deals with, and is linked with subjects such as education, recreation, tourism and conservation. It is also supported by another set of subjects, such as psychology, sociology, economics and marketing (Ferreira, 1990). Interpretation is often used as a tool to help increase visitors' understanding and awareness of the place visited, and as a management instrument to protect sensitive areas.

Interpretation seems to have its roots in the United States at the beginning of this century (Aldridge, 1975). It is also believed that its origin can be attributed and influenced by the establishment of the Open Air Museum in Stockholm and the Folk Museum in Oslo at the end of last century (Phillips, 1989). Despite all this, Tilden (1977) was the first person to provide a real definition and set the basic principles of interpretation in 1965.

#### RESEARCH PROJECT

A visitor survey was carried out over two weeks in September-October 1989 at the Ponta de São Lourenço, in Madeira (figure 1). It was developed in the car park adjacent to the beach called "Prainha". The place was considered as a suitable one for the survey because it is located by the side of the beach, which attracts many people. Furthermore, it has a small picnic area, with tables and benches, which enable visitors to sit and relax while answering the questionnaire. The main objectives of the survey consisted of finding out the following:

- a) To trace the pattern of visitor groups and their socio-economic characteristics, such as age, income, level of education, etc.
- b) To find out what local people and tourists seek when visiting the site and their opinion about it.
- c) To identify whether local people and tourists have the same willingness to learn about the site, while visiting it.
- d) To find out whether the introduction of interpretation would be of interest to local people, tourists and the government.
- e) To outline potential interpretive programmes for the site and the whole island.

f) To calculate the value of the Ponta de São Lourenço as a recreational site, by using the travel cost and hypothetical valuation approaches.

The results from the last objective will help to set a financial/economic value to the site, which could be of great support and preliminary reference in the event of any circumstance that implies threat to the area. The survey was only applied to Madeiran visitors.

#### **METHODS**

Madeirans and tourists were counted and interviewed during weekends and weekdays. The interview was carried out through a questionnaire survey. Frequency of distribution for the first three objectives was carried out using the SPSS statistical pack.

The travel cost and hypothetical valuation approaches are indirect ways to find out the price of services that do not need to be paid for. It includes recreational places like public parks, scenic landscapes, beaches, etc. The first works detailing travel cost methods and its application were by Clawson (1959), Knetsch (1963), Cesario and Knestch (1970) and Cesario (1976). The present work is an adaptation of the procedures employed by Grandstaff and Dixon (1986), both for travel cost and hypothetical valuation.

The travel cost is based on the amount of money and time visitors spent on their round trip to the site. The hypothetical valuation focuses on estimating the value of the site by the amount of money visitors are willing to pay to maintain the site as it is. A theoretical model can be stated for the travel cost, where the amount of visits, or the visitation rate to the Ponta de São Lourenço is a function of the travel cost (price of petrol, bus, taxi, etc.), the round trip time to visit the site, income and travel cost of visiting substitute sites. This function is given by:

## V<sub>i</sub>=f(TTC, I, TS)

#### where:

V<sub>i</sub>=visitation rate/1,000 for each area(<sub>i</sub>), where visitors come from, at zero admission fee

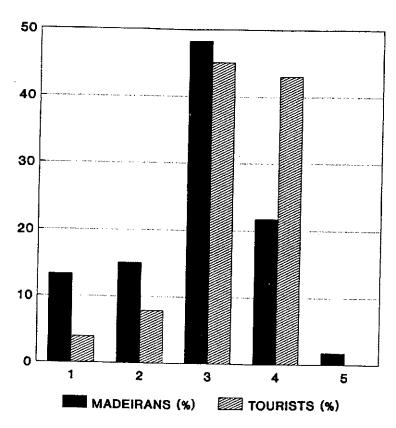
TTC=Total travel cost of round trip for each area (travel cost and time)

TS=travel cost of substitute sites

By performing a regression on the visitation rate in accordance with increasing travel cost for each area (starting with no admission fee), a demand curve is obtained (figure 3), which represents the benefits and value of the site.

The hypothetical valuation was calculated by asking visitors how much they would be willing to pay to maintain the site, including the beach, per year. The form of payment could be taxed as an annual entrance fee.

# INTEREST TO KNOW ABOUT NATURAL HISTORY



1-NO INTEREST 2-LITTLE INTEREST 3-SOME INTEREST 4-VERY MUCH INTEREST 5-DON'T KNOW

Figure 2

# **RESULTS AND SURVEY ANALYSIS**

112 visitors were interviewed. Among them 60 were local people and 52 were tourists. They usually come from five different areas around the island, which are Funchal, Machico, Santa Cruz, Câmara dos Lobos and Santana. Madeirans tend to visit the area more frequently on weekends, particularly on Sundays, while tourists frequency are more spread along the week. The beach seems to be popular to family with children since the 'Prainha' is the only one which provides security for children to run and play on the sand. Most visitors, including Madeirans and tourists are aged between 25 to 44 years old.

As far as educational level is concerned, local people have predominantly primary and secondary qualification, whilst most tourists have secondary and university degrees. 72% of tourists were visiting the island for the first time, 12% were visiting for the second time.

The aspirations of madeirans seem to be generally different from those of tourists, when visiting the site. Madeirans think the place should be more developed, with construction of bar, restaurant and toilet facilities to attract more tourists. Tourists like the site as it is, with its dry landscape, scenery and generally go for hiking. Both groups agree that the Prainha needs periodical cleaning.

Both Madeirans and tourists are interested in learning more about the site during their visit (figure 3). Local authorities and visitors seemed to be interested in having interpretation developed not only in the Ponta de São Lourenço, but also on the whole island. Different organizations are enthusiastic in providing some help to have it implemented.

As far as the travel cost results are concerned, the regression analysis carried out by the SPSS statistical package shows that variables like income and travel cost of substitute sites failed to enter the equation analysis due to lack of correlation between them and the visitation rate (at 0.05 level of significance). The regression equation as a result of the statistical analysis is then:

V=9454.74 - 1.13 TTC (t=6.873, p=0.0063, R=0.886)

where:

R= measure of goodness of fit of linear model (SPSS, 1988)

A demand curve (figure 3) was then obtained by estimating the total number of visits in each of the five areas at a certain admission fee (increase in travel cost). If there is an increase in travel expenses, the respective value is added to the total travel cost (TTC). The demand curve is divided into twelve parts. By determining the sum of the area of these twelve parts the total value of the area is then calculated as  $10.7 \times 10^6$  escudos per year, which is approximately £51,136. The hypothetical valuation results is a total of  $46.6 \times 10^6$  escudos (£221,894) per year.

# **DEMAND CURVE**

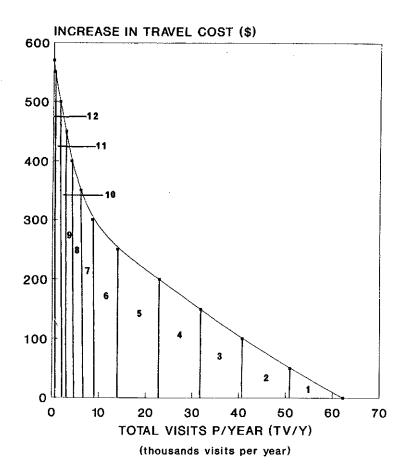


Figure 3

These values are actually twice as much or even more, since the survey did not include tourists travel cost. Also the willingness to pay by Madeirans who were not visiting the site were not taken into account, although they are potential visitors and would like to pay to keep the site. The intention of this analysis is also to show that this type of procedure can be used in resorts like Madeira and that it can help in decision making on conservation matters. In order to carry out this kind of survey in a more complete way, some things should be considered, such as: a) more extensive study of the literature; b) larger sample of visitors; c) data collection throughout the year at different seasons; d) a more precise counting of Madeirans and tourists who pass through the site.

To help increase the understanding and conservation of the site, a report including some guidelines for the development of an interpretive plan for the site and other places in the Parque Natural was produced and given to the staff of the Parque Natural da Madeira. The report also presents some interpretive proposals. These proposals include: a) a self-guided trail route along the Ponta de São Lourenço, highlighting some important stops and features that should be addressed to visitors; b) guided tours; c) construction of a visitor centre or kiosk on a selected place in the Parque Natural; d) the use of living history on places like Santana and Camacha; e) demonstration of fishing techniques in places like Caniçal, Machico, Câmara dos Lobos or Paul do Mar. A panel for the area of the Ponta de São Lourenço was designed as an example of another type of interpretive proposal that could be used in the site and in other parts of the island. It exemplifies the type of language and layout that eases peoples' understanding, in an attempt to bring them to a respect and concern for the value of the site and its conservation.

# CONCLUSION

In summary, the Ponta de São Lourenço seems to be a valuable resource, not only in monetary terms, but also in terms that cannot be measured, and which has not yet been developed in all its potential. The fact that the area is unique in the island should be of greater concern than it is now. All the benefits it provides, such as its scenic view and scientific resources, must be enhanced and presented to the visitor in clear and comprehensive way.

No proper interpretive work has been developed for the whole island concerning its natural history, geology, geographic features and social aspects. Madeirans and tourists would like to see it done, but how much would they be willing to pay? Probably not much! If the introduction of this kind of work implies an increase in cost to visitors, the number of Madeirans willing to take part will probably be few. Interpretation should therefore be developed for the site and the whole island, as much as possible free of direct charge to local citizens in an attempt to stimulate and increase their knowledge and concern about the value of their island. As far as tourists are concerned, contact with interpretive work and visitor centres is something they are likely to be familiar with in their countries, especially those from Britain, Germany, France and Scandinavia. The introduction of these activities in the island would give them greater insights, motivation and enjoyment, besides an opportunity to learn more about the place they are visiting and its people. They would be probably willing to pay, directly or indirectly for the continuation of the establishment and maintenance of the sites.

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